C Williamson 5/13/96
C Alvarado 5-17-96

SN5443

MAY 31 1996

In Reply Refer To: MS 5232

Tennessee Gas Pipeline Company
Attention: Mr. William M. Murray
Sugar Mill Point
1115 Regal Row
Houma, Louisiana 70360

Gentlemen:

Your letter dated March 12, 1996, requests approval to permanently abandon in place approximately 8,773 feet (1.66 miles) of 10-inch pipeline designated as Segment No. 5443, and to relinquish in its entirety, Right-of-Way Grant OCS-G 4040 associated therewith. The subject pipeline was used to transport gas from Platform B in Block A-336 to Platform A in Block A-343, High Island Area.

Pursuant to 30 CFR 250.4(b), approval is hereby granted to abandon the above described pipeline, and in accordance with 30 CFR 250.159(c), the requirement that the pipeline be removed is hereby waived. However, in the future, should it be determined that this abandoned pipeline constitutes a hazard to navigation or commercial fishing operations or unduly interferes with the other uses of the Outer Continental Shelf, Tennessee Gas Pipeline Company shall be required to remove it.

Pursuant to 30 CFR 250.150(b), the relinquishment of the right-of-way grant associated with the pipeline that is to be abandoned in place is hereby accepted effective March 15, 1996.

Sincerely,

(Orig. Sgd.) Kent E. Stauffer

Donald C. Howard
Regional Supervisor
Field Operations

bcc: 1502-01 (P/L OCS-G 4040) w/enclosures (K.Faust) (MS 5232)
1502-01 (P/L OCS-G 4040) (microfilm) (MS 5033)
MS 5421
MS 5232 Carto

WWilliamson:amm:4/9/96:Tennesse.443

G4040

MS5443

gm ms 6/6/96

Tennessee Gas Pipeline
Tenneco Energy
Sugar Mill Point
1115 Regal Row
Houma, Louisiana 70360

Tel 504 868 6785
Fax 504 868 1423

TENNECO Energy

March 12, 1996

U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394
Attention: Warren Williamson

Re: Permanent Abandonment and Relinquishment of Pipeline Right of Way, OCS-G 4040, Seg. No. 5443, High Island Block A-336-B Line

Dear Warren:

In accordance with Title 30 CFR Part 250, Subpart J, 250.156 and 250.164, Tennessee Gas Pipeline Company hereby requests approval to permanently abandon and relinquish approximately 1.66 miles of ten inch (10") pipeline in the High Island Area, Offshore Texas.

The temporary cessation of the above pipeline was approved on April 10, 1995. Tennessee Gas Pipeline Company hereby requests approval to relinquish the pipeline right of way associated with this abandonment. TGP is requesting this permanent abandonment and relinquishment based on the fact that there is no future use for this pipeline. This line has been abandoned as proposed since April 1995.

If you should require any additional information regarding this matter, please call this office.

Sincerely,

B. J. Chaney, Supervisor Rights
of Way as Agent and Attorney-in-Fact

KJC:kjc

cc: M. Taylor
P. Craft
P. Alexis
L. Rosales
File

Both ends cut, capped & buried as outlined in "out" letter of 3/17/95!

Patton 3-21-95

SN5443

APR 1 0 1995

In Reply Refer To: MS 5232

Tennessee Gas Pipeline Company
Attention: Mr. B. J.Chaney
Sugar Mill Point
1115 Regal Row
Houma, Louisiana 70360

Gentlemen:

Pursuant to the authority granted by 30 CFR 250.150(b), your request dated March 17, 1995, for modification of pipeline Right-of-Way OCS-G 4040 to allow for the temporary cessation of operation of pipeline Segment No. 5443 is hereby approved, subject to the following conditions:

1. The annual rental required by 30 CFR 250.159(c)(2) shall continue to be due and payable in December of each calendar year.

2. Tennessee Gas Pipeline Company shall, upon receipt of the necessary documentations which are required by the Federal Energy Regulatory Commission under Tennessee Gas Pipeline Company's blanket abandonment authorization, file an application to permanently abandon the subject pipeline and relinquish the right-of-way grant.

Sincerely,

(Orig. Sgd.) Kent E. Stauffer

Donald C. Howard
Regional Supervisor
Field Operations

bcc: 1502-01 (P/L OCS-G 4040) w/orig application (MS 5232)
1502-01 (P/L OCS-G 4040) w/cy of application (MS 5033)
MS 5232 Carto w/cy of location plat

FPatton:amm:3/21/95:Tennesse.443

G4040

on map 4/11/95

MS 5232

Tennessee Gas Pipeline
A Tenneco Company

Sugar Mill Point
1115 Regal Row
Houma, Louisiana 70360
(504) 868-6785

March 17, 1995

U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Attention: Mike Conner

Re: Temporary abandonment of 8" natural gas pipeline, High Island Block A-336B Line, OCS-G 4040, Segment No. 5443

Dear Mike:

In accordance with Title 30 CFR Part 250, Subpart J, 250.156, Tennessee Gas Pipeline Company hereby requests approval to temporarily abandon the above referenced pipeline in the High Island Area, Gulf of Mexico, Offshore Texas.

This pipeline extended from Tenneco Oil Company's High Island Block A-336-B platform to H.I.O.S.'s High Island Block A-343-A platform. The procedure which was used to abandon this facility is attachd hereto.

Upon receipt of the necessary documentation, i.e., P & A reports, etc., which are required by FERC under TGP's blanket abandonment authorization, TGP will file to permanently abandon the above pipeline.

The line was purged with seawater to remove any materials which may have been harmful to the environment prior to abandonment.

Also, enclosed are three copies of Drawings which have been red-marked to show the completed work.

If you should require any additional information regarding this matter, please call this office.

Sincerely,

B. J. Chaney, Supervisor
Rights of Way as Agent
and Attorney-in-Fact

BJC/KJC:kjc

Enclosures

cc: Marty Taylor
O. O. Jones
L. Rosales
G. Benoit
File

3-10-95 pjc

ABANDONMENT PROCEDURE
High Island A-336
Completed June 1983

1. Mobilize equipment to Tenneco Oil's High Island A-336-A platform and close main line Valve No. 823X-1602.

2. Install 8" Poly pig in pig trap.

3. Launch and run pig with high pressure water. (9,463 ft. of 8.625" O. D. x .406 W. T. Pipe = 23,300 gallons.)

4. When pig reaches trap at H.I.O.S. High Island A-343-A platform, close main line valve 823X-1601.

5. Bleed water pressure from line.

6. Cut 8" pipeline sub-sea at base of risers at stations 4+50.7 and 91+52.6 (water depth approx. 235 ft.)

7. Install 8" foreman plugs in ends of abandoned pipeline.

8. Jet down ends of 8" pipeline and ensure they have 3 ft. of cover.

9. At High Island A-343-A, remove meter station, platform piping and riser from H.I.O.S. platform. Install 16" blind flange and 6" blind flange on H.I.O.S. piping.

10. At High Island A-336-A, remove meter station, platform piping and riser from Tenneco Oil platform. (Tenneco Oil to relocate and re-use platform decks)

TAX DISTRICT DATA	

BEST AVAILABLE COPY

OWNERSHIP & LINE LIST NO.
H.I.O.S.-HI.ISL.BLK.A-336A

UNITED STATES OF AMERICA
GULF OF MEXICO

94+63¾ END LINE — 0+00 BEGIN LINE

PT.	BEARING & DISTANCE		LAMBERT COORDINATES	
1			X=3,694,520.97'	Y=131,646.72'
2	N 72°32'45"W -	622.85'	X=3,693,933.47'	Y=131,830.08'
3	N 52°04'32"W -	374.93'	X=3,693,637.91'	Y=132,060.52'
4	N 64°51'25"W -	1,053.02'	X=3,692,681.63'	Y=132,507.92'
5	N 62°19'04"W -	494.61'	X=3,692,246.96'	Y=132,737.71'
6	N 65°59'40"W -	449.37'	X=3,691,836.14'	Y=132,920.52'
7	N 61°10'39"W -	642.09'	X=3,691,272.80'	Y=133,230.46'
8	N 72°41'44"W -	428.65'	X=3,690,863.60'	Y=133,357.96'
9	N 70°28'58"W -	498.47'	X=3,690,390.78'	Y=133,523.49'
10	N 53°01'27"W -	521.35'	X=3,689,979.81'	Y=133,837.06'
11	N 77°24'38"W -	495.14'	X=3,689,496.87'	Y=133,944.93'
12	N 66°21'15"W -	557.29'	X=3,688,986.41'	Y=134,168.46'
13	N 63°40'10"W -	477.34'	X=3,688,558.26'	Y=134,380.27'
14	N 61°47'21"W -	1,029.26'	X=3,687,651.45'	Y=134,866.81'
15	N 72°44'11"W -	1,284.57'	X=3,686,415.25'	Y=135,251.00'
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				

PROFILE
SCALE: HORIZ: 1"=400 FT. VERT: 1"= 20 FT.

ITEM NO.	MATERIAL SUMMARY — DESCRIPTION
1	ANODES, CYLINDRICAL 8"
2	PIPE, 8.625"O.D. X .406"W.T. GR.X-42 U.S. Steel
3	PIPE, 8.625"O.D. X .500"W.T. GR. B Youngstown
	COATING "A" --- 3M Scotchkote 212

NOTE: CO-ORDINATES ON POINTS 1-15 WERE ESTABLISHED BY ODOM OFFSHORE SURVEY & ASSOC. SURVEY BEARINGS AND DISTANCES WERE CALCULATED USING THE LAMBERT GRID (LOUISIANA SOUTH ZONE) SYSTEM. THE ROUTE AS SHOWN MAY NOT NECESSARILY BE THE EXACT LOCATION OF THE PIPELINE.

R.O. 86156 6-1983

C.O. NUMBER & DESCRIPTION	C.O. 46873 ORIG. CONST.
FIELD BOOKS — PRELIM.	
CONST.	13862
FINAL	13862
LOG NOTES	14078 13887

REFERENCE DRAWINGS	
DRAWING NO.	TITLE
TO-F2-823X-1600-IA & IAI	PIPING DETAILS PLATFORM A-343A
TO-F2-823X-1600-IB & IBI	PIPING DETAILS PLATFORM A-336A

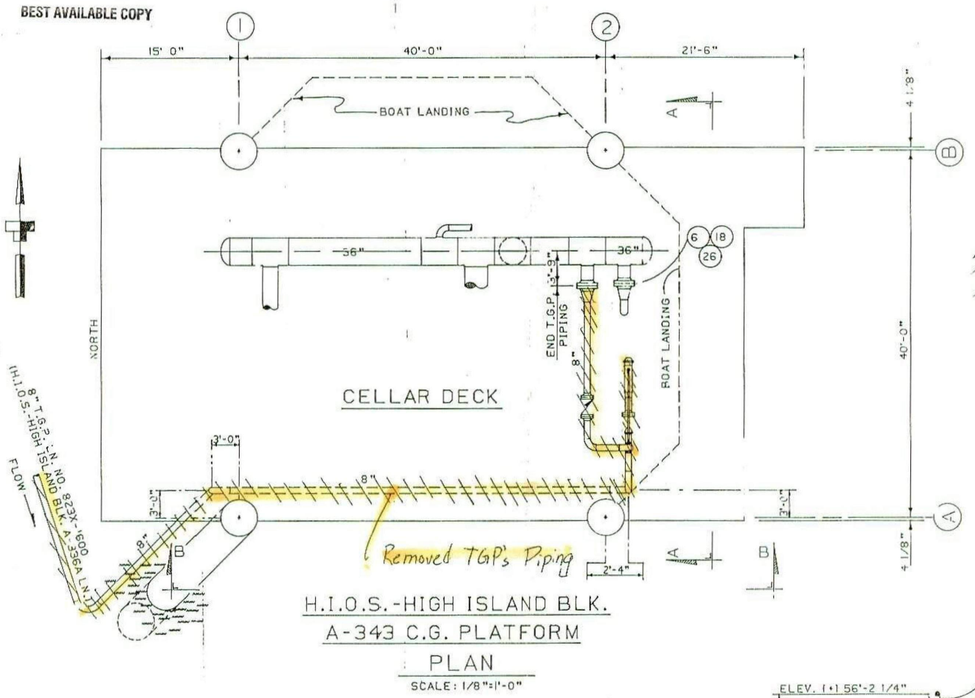
Tennessee Gas Pipeline Company
Division of Tenneco Inc.
Engineering Department — Houston, Texas

DRAWN BY RAS JR.	DATE 8-24-81
CHECKED BY AMJ	DATE 10-9-81
CORRECT BY RSM	DATE 11-5-81
DESIGNED BY	DATE
APPROVED BY HMM	DATE 11-6-81
	SCALE: SHOWN
ISSUE DATES — ORIGINAL	8-28-82
LAST	8-28-84

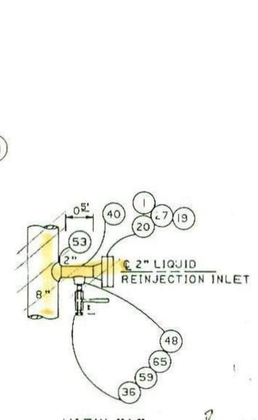
H.I.O.S.- HIGH ISLAND BLK.A-336A LN.
LINE NO. 823X-1600
HIGH ISLAND AREA, GULF OF MEXICO
VALVE SECTION — ENTIRE LINE ON THIS SHEET

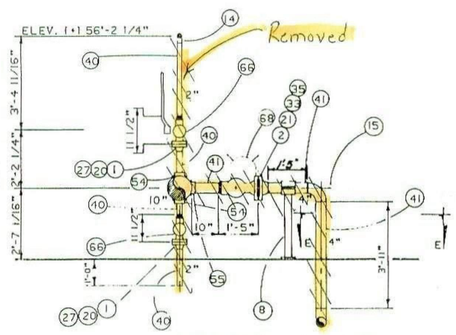
APPROVED BY J.P. Holloway 11-11-81 ASST. CHIEF ENGINEER
TENNESSEE GAS PIPELINE CO.
TO-F2-823X-1600-1

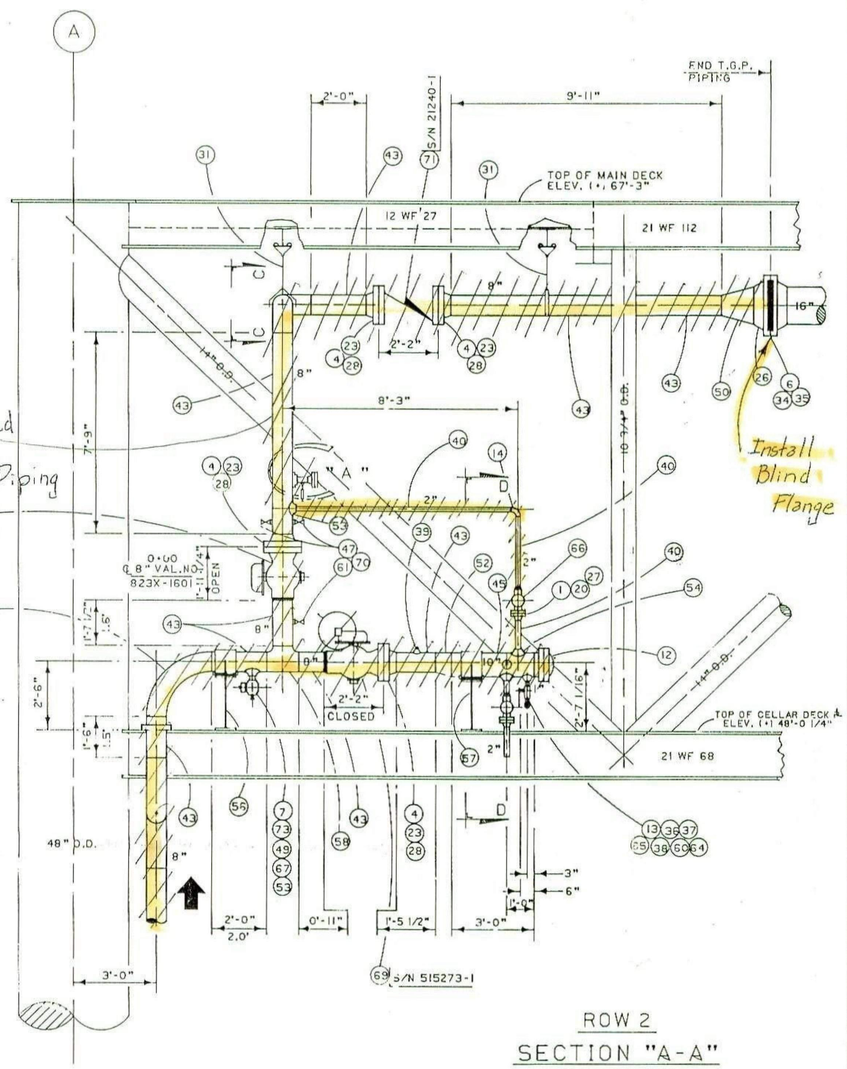
BEST AVAILABLE COPY

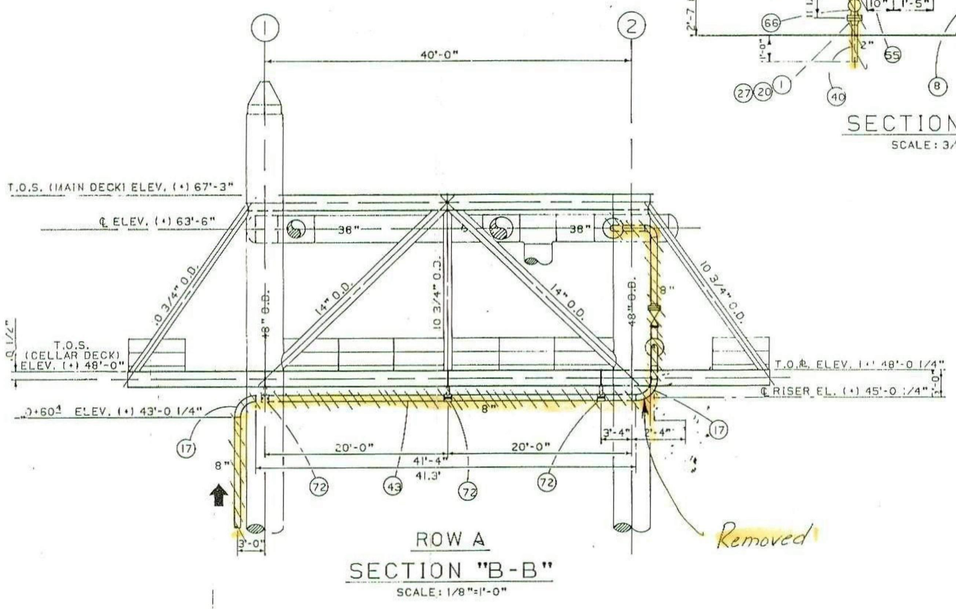


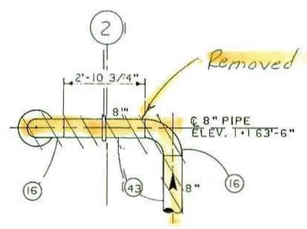
H.I.O.S.-HIGH ISLAND BLK.
A-343 C.G. PLATFORM
PLAN
SCALE: 1/8"=1'-0"

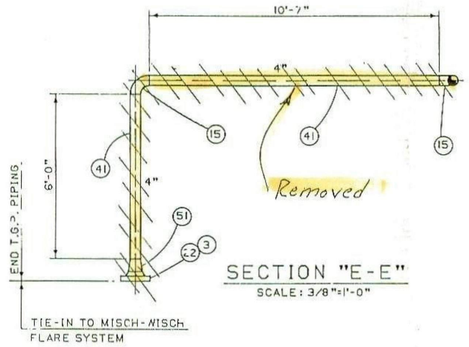












MATERIAL LEGEND

ITEM NO.	DESCRIPTION
1	BOLTS, STUD, 5/8" X 4 1/2" ALLOY STEEL, W/2 HEX NUTS EACH.
2	BOLTS, STUD, 7/8" X 6" ALLOY STEEL, W/2 HEX NUTS EACH.
3	BOLTS, STUD, 3/4" X 5" ALLOY STEEL, W/2 HEX NUTS EACH.
4	BOLTS, STUD, 1 1/8" X 8" ALLOY STEEL, W/2 HEX NUTS EACH.
5	BOLTS, STUD, 1 3/8" X 13" ALLOY STEEL, W/2 HEX NUTS EACH
6	BOLTS, STUD, 1 1/2" X 10" ALLOY STEEL, W/2 HEX NUTS EACH.
7	BUSHING, 2" X 1/2" F.S. SCREWED, 6000 P.S.I. WOG
8	CLAMP, PIPE AND BRACE, FOR 4" PIPE (COMPLETE)
9	CLAMP, RISER, FOR 8" PIPE
10	CLAMP, RISER, FOR 6" PIPE
11	CLAMP, RISER, FOR 8" PIPE
12	CLOSURE, HINGED, 10" A.N.S.I. 600 •
13	ELL, STREET, 1" A.N.S.I. 3000 • 90° SCREWED
14	ELL, WELD, 2.375" O.D. X .218" W.T. GR.B 90° LR. (0.5' LG.)
15	ELL, WELD, 4.500" O.D. X .337" W.T. GR.B 90° LR. (1.0' LG.)
16	ELL, WELD, 8.625" O.D. X .500" W.T. GR.B 90° LR. (2.0' LG.)
17	ELL, WELD, 8.625" O.D. X .500" W.T. GR.X-42 90 DEG. 3DIA. (4.0' LG.)
18	GASKET, 16" A.N.S.I. 600• OVAL RING NO. 65
19	FLANGE, 2" A.N.S.I. 600 • RTJ BLIND ASTM A105
20	FLANGE, 2" A.N.S.I. 600 • RTJWN ASTM A105
21	FLANGE, 4" A.N.S.I. 600 • RTJWN A.TM A105
22	FLANGE, 6" A.N.S.I. 150 • RFWN
23	FLANGE, 8" A.N.S.I. 600 • RTJWN ASTM A105
24	FLANGE, 8" A.N.S.I. 900 • RTJWN ASTM A105
25	FLANGE, 8" A.N.S.I. 900 • SWIVEL RING RTJ ASTM A105
26	FLANGE, 16" A.N.S.I. 600 • RTJWN GR. X-52
27	GASKET, 2" A.N.S.I. 600 • OVAL RING R23
28	GASKET, 8" A.N.S.I. 600 • OVAL RING R49
29	GASKET, 8" A.N.S.I. 900 • OVAL RING R49
30	GUARD, RISER, FOR 8" PIPE (COMPLETE)
31	HANGER, C-EVIS, FOR 8" PIPE (COMPLETE)
33	INSULATING, SET, 4" A.N.S.I. 600 • (COMPLETE)
34	INSULATING, SET, 16" A.N.S.I. 600 • (COMPLETE)
35	LUG, THOMAS A'D BETTS NO.32009
36	NIPPLE, PIPE, 1" X 4" LG. XH (T.B.E.)
37	NIPPLE, PIPE, 1" X 6" LG. XH (T.B.E.)
38	NIPPLE, PIPE, 1" X 6" LG. XH (T.O.E.)
39	PIG, INDICATOR, FOR 8" O.D. X .406" W.T.GR.B PIPE, KIDD MODEL 2005
40	PIPE, 2.375" O.D. X .218" W.T. GR.B *U.S. Steel*
41	PIPE, 4.500" O.D. X .337" W.T. GR. B *U.S. Steel*
42	PIPE, 8.625" O.D. X .406" W.T. GR. X-42 *U.S.Steel*
43	PIPE, 8.625" O.D. X .500" W.T. GR. B *Youngstown*
44	PIPE, 8.625" O.D. X .500" W.T. GR. B *Youngstown* (30'-0" NEOPRENE COATED)
45	PIPE, 10.750" O.D. X .500" W.T. GR. X-42 *U.S. Steel*
46	PIPE, 8.625" O.D. X .500" W.T. GR. B, FOR 10°02'00" FABRICATED COLD BEND 111.2' LG.) *U.S. Steel*
47	PLUG, HEX, 1/2" A.N.S.I. 3000 P.S.I. STAINLESS STEEL SCRD.
48	PLUG, HEX, 1" A.N.S.I. 3000 P.S.I. STAINLESS STEEL SCRD.
49	PLUG, P-ECCO, 1/2" A.N.S.I. 3000 P.S.I. F.S. SCREWED (NYE-COATED)
50	REDUCER, CONCENTRIC, WELD, 16" O.D. X .500" W.T. X 8.625" O.D. X .500" W.T. GR. Y-52 (1.2' LG.)
51	REDUCER, CONCENTRIC, WELD, 6.625" O.D. X .432" W.T. X 4.500" O.D. X .337" W.T. GR. B (0.5' LG.)
52	REDUCER, ECCENTRIC, WELD, 10.750" O.D. X .500" W.T. X 8.625" O.D. X .500" W.T. GR. B (0.6' LG.)
53	SADDLE, STD. WELD, 2" X 8"
54	SADDLE, STD. WELD, 2" X 10"
55	SADDLE, STD. WELD, 4" X 10"
56	SUPPORT, SHIM BLOCK, FOR 8" PIPE (COMPLETE)
57	SUPPORT, SHIM BLOCK, FOR 10" PIPE (COMPLETE)
58	TEE, WELD, 8.625" O.D. X .500" W.T. GR. B W/SCRAPPER BARS (1.2') LG.
59	THREDOLET, 2 1/2" - 2" X 1" 6000 P.S.I. F.S.
60	THREDOLET, 10" - 3" X 1" 6000 P.S.I. F.S. NPT
61	THREDOLET, 36" - 8" X 1/2" 6000 P.S.I. F.S. NPT
62	VALVE, BALL, 8" A.N.S.I. 600 • CAMERON (W/RTJ)
63	OPERATOR, RC 35 (S/N 76850)
64	UNION, F.S. GJ INSUL, 1" A.N.S.I. 3000 • SCREWED
65	VALVE, BALL, 1" 3000 P.S.I. JAMESBURY NO. HP36GT W/HANDLE
66	VALVE, BALL, 2" A.N.S.I. 600 • (W/RTJ)
67	VALVE, BALL, 2" FPT 1500 • W.K.M. FIG. NO. 310
68	VALVE, BALL, 4" A.N.S.I. 600 • W/MANUAL OPERATED GEARING AND HANDWHEEL (W/RTJ)
69	VALVE, BALL, 8" A.N.S.I. 600 • GROVE W/MANUAL OPERATED GEARING HANDWHEEL (W/RTJ)
70	VALVE, GLOBE, 1/2" FPT X 1/2" MPT 6000 • WHITEY TYPE 316SS
71	VALVE, TOM WHEATLEY SWING CHECK, 8" A.N.S.I. 600 • (RTJ/RTJ)
72	CLAMP, PIPE AND BRACE, FOR 8" PIPE (COMPLETE)
73	THRED-O-RING, 2" XH W/PIPE CAP AND BRACE PLUG T.D. WILLIAMSON TYPE
--	COATING "A" -- 3M *Scotchkote 212*

THIS DWG. CURRENT THRU: 9-79

REFERENCE DRAWINGS			
DRAWING NO.	TITLE	DRAWING NO.	TITLE
TO-F2-823X-1600-1A	PLATFORM A-343 - PIPING DETAILS		

REVISIONS					
NO.	DATE	REMARKS	REV.	CK'D.	APP.

Tennessee Gas Pipeline Company
Division of Tenneco Inc.
Engineering Department Houston, Texas

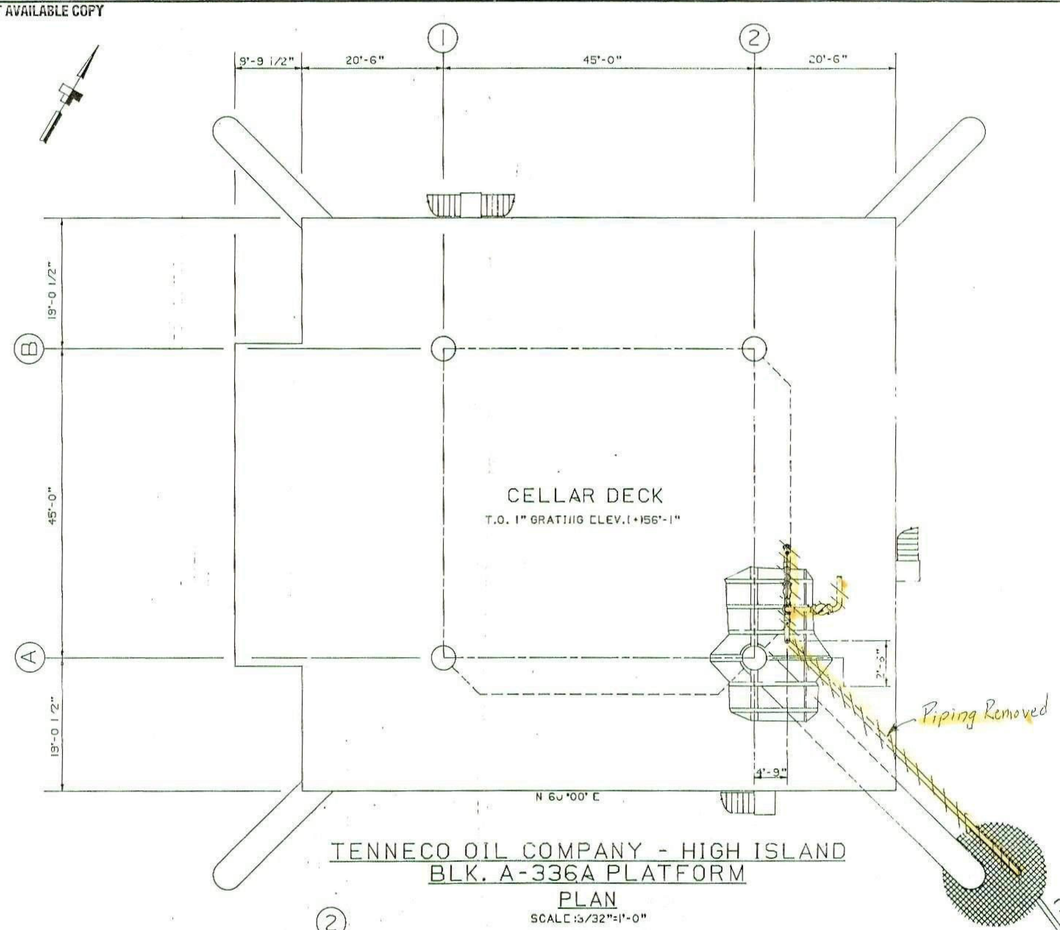
6-1983

DRAWN BY D.L.	DATE 8-13-81	
CHECKED BY AMJ	DATE 10-9-81	
CORRECT BY JSM	DATE 11-5-81	
DESIGNED BY	DATE	
APPROVED BY HMM	DATE 11-6-81	
	SCALE SHOWN	
ISSUE DATES ORIGINAL	2-28-82	
ISSUE DATES LAST	5-28-82	

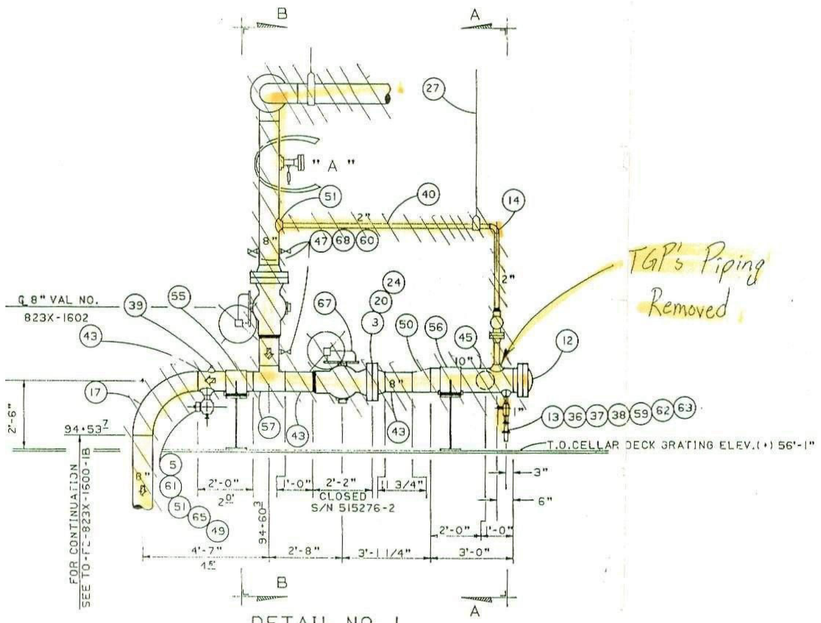
PIPING DETAILS
H.I.O.S.-HIGH ISLAND BLK. A-343 PLATFORM
HIGH ISLAND AREA, GULF OF MEXICO

APPROVED BY J.P. Hallowell 11.11.81 ASST. CHIEF ENGINEER
TENNESSEE GAS PIPELINE CO.
TO-F2-823X-1600-1A1

BEST AVAILABLE COPY



TENNECO OIL COMPANY - HIGH ISLAND
BLK. A-336A PLATFORM
PLAN
SCALE:3/32"=1'-0"



DETAIL NO. 1
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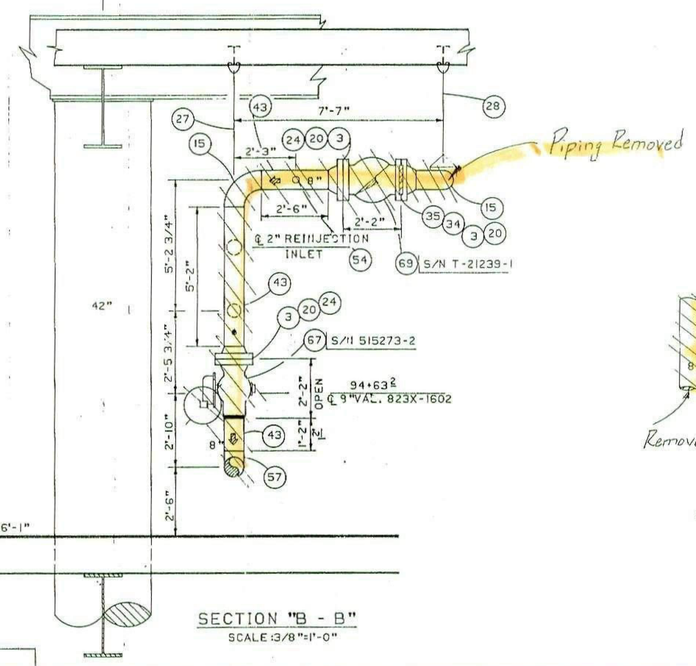
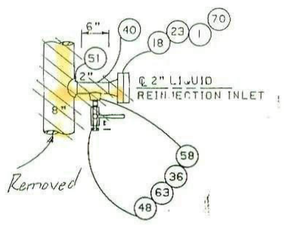
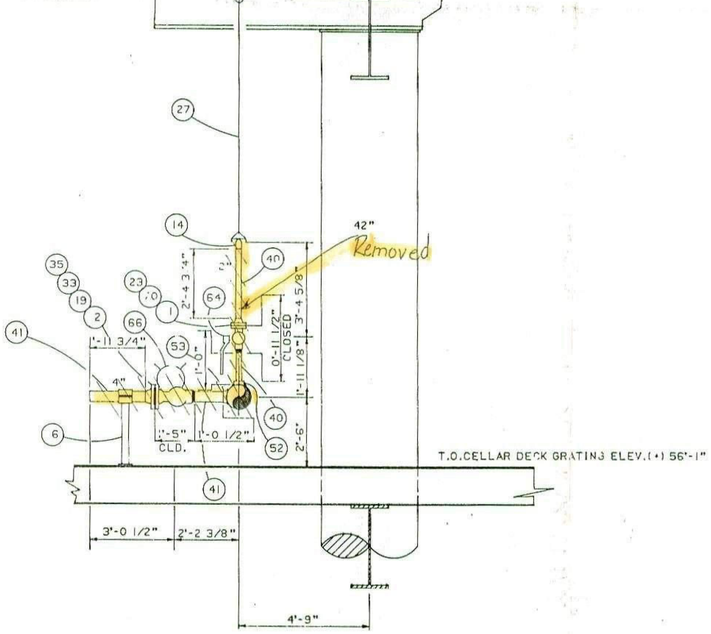


SECTION "B - B"
SCALE:3/8"=1'-0"



VIEW "A"
SCALE:3/8" = 1'-0"



SECTION "A - A"
SCALE:3/8"=1'-0"

MATERIAL LEGEND

ITEM NO.	DESCRIPTION
1	BOLTS, STUD, 5/8" DIA. X 4 1/2" LG. ALLOY STEEL, W/2 HEX NUTS EACH.
2	BOLTS, STUD, 7/8" DIA. X 6" LG. ALLOY STEEL, W/2 HEX NUTS EACH.
3	BOLTS, STUD, 1 1/8" DIA. X 8" LG. ALLOY STEEL, W/2 HEX NUTS EACH.
4	BOLTS, STUD, 1 3/8" DIA. X 13" LG. ALLOY STEEL, W/2 HEX NUTS EACH.
5	BUSHING, 2" X 1/2" F.S. SCREWED, 6000 P.S.I. WOG
6	CLAMP, PIPE AND BRACE, FOR 4" PIPE (COMPLETE)
7	CLAMP, RISER, FOR 8" PIPE
8	CLAMP, RISER, FOR 8" PIPE
9	CLAMP, RISER, FOR 8" PIPE
10	CLAMP, RISER, FOR 8" PIPE
11	CLAMP, RISER, FOR 8" PIPE
12	CLOSURE, HINGED, 10" A.N.S.I. 600 •
13	ELL, STREET, 1" A.N.S.I. 3000 • SCREWED
14	ELL, WELD, 2.375" O.D. X .218" W.T. GR.B 90° LR. (0.5' LG.)
15	ELL, WELD, 8.625" O.D. X .500" W.T. GR.B 90° LR. (2.0' LG.)
16	ELL, WELD, 8.625" O.D. X .500" W.T. GR.B 80°06' 30IA. (3.4' LG.)
17	ELL, WELD, 8.625" O.D. X .500" W.T. GR.B 90° 30IA. (4.0' LG.)
18	FLANGE, 2" A.N.S.I. 600 • RTJ BLIND
19	FLANGE, 4" A.N.S.I. 600 • RTJWN
20	FLANGE, 8" A.N.S.I. 600 • RTJWN
21	FLANGE, 8" A.N.S.I. 900 • RTJWN
22	FLANGE, 8" A.N.S.I. 900 • SWIVEL RING RTJ
23	GASKET, 2" A.N.S.I. 600 • OVAL RING R23
24	GASKET, 8" A.N.S.I. 600 • OVAL RING R49
25	GASKET, 8" A.N.S.I. 300 • OVAL RING R49
26	GUARD, RISER, FOR 8" PIPE (COMPLETE)
27	HANGER, CLEVIS, FOR 2" PIPE (COMPLETE)
28	HANGER, CLEVIS, FOR 8" PIPE (COMPLETE)
33	INSULATING, SET, 3" A.N.S.I. 600 • (COMPLETE)
34	INSULATING, SET, 8" A.N.S.I. 600 • (COMPLETE)
35	LUG, THOMAS AND BETTS NO.32009
36	NIPPLE, PIPE, 1" X 3" LG. XH (T.B.E.)
37	NIPPLE, PIPE, 1" X 5" LG. XH (T.B.E.)
38	NIPPLE, PIPE, 1" X 6" LG. XH (T.O.E.)
39	PIG INDICATOR, FOR 8" O.D. X .500" W.T.GR.B PIPE, K100 MODEL 2005
40	PIPE, 2.375" O.D. X .218" W.T. GR.B *U.S. Steel*
41	PIPE, 4.500" O.D. X .337" W.T. GR.B *U.S. Steel*
42	PIPE, 8.625" O.D. X .406" W.T. GR. X-42 *U.S. Steel*
43	PIPE, 8.625" O.D. X .500" W.T. GR. B *Youngstown*
44	PIPE, 8.625" O.D. X .500" W.T. GR. B *Youngstown* (30'-0" NEOPRENE COATED)
45	PIPE, 10.750" O.D. X .500" W.T. GR. X-42 *U.S. Steel*
46	PIPE, 8.625" O.D. X .500" W.T. GR. B, FOR 10°02'00" FABRICATED COLD BEND (14.0' LG.) *U.S. Steel*
47	PLUG, HEX, 1/2" A.N.S.I. 3000 P.S.I. STAINLESS STEEL SCRD.
48	PLUG, HEX, 1" A.N.S.I. 3000 P.S.I. STAINLESS STEEL SCRD.
49	PLUG, PLEECO, 1/2" A.N.S.I. 3000 P.S.I. F.S. SCREWED (NYE-COATED)
50	REDUCER, ECCENTRIC, WELD, 10.750" O.D. X .500" W.T. X 8.625" O.D. X .500" W.T. GR. B (0.6" LG.)
51	SADDLE, STD. WELD, 2" X 8"
52	SADDLE, STD. WELD, 2" X 10"
53	SADDLE, STD. WELD, 4" X 10"
54	SOCKOLET, TOSASCO 10" - 2" NO. 120327
55	SUPPORT, SHIM BLOCK, FOR 8" PIPE (COMPLETE)
56	SUPPORT, SHIM BLOCK, FOR 10" PIPE (COMPLETE)
57	TEE, WELD, 8.625" O.D. X .500" W.T. GR. B W/SCRAPPER BARS
58	THREDOLET, 2 1/2" - 2" X 1" 6000 P.S.I. F.S.
59	THREDOLET, 10" - 3" X 1" 6000 P.S.I. F.S. NPT
60	THREDOLET, 36" - 3" X 1/2" 6000 P.S.I. F.S. NPT
61	THREAD-O-RING, 2" XH WELD NIPPLE W/MACHINED STEEL PIPE CAP AND BRASS PLUG
62	UNION, F.S. GJ INSUL, 1" A.N.S.I. 3000 • SCREWED
63	VALVE, BALL, 1" 3000 P.S.I. JAMESBURY NO. HP36GT W/HANDLE
64	VALVE, BALL, 2" A.N.S.I. 600 • (W/RTJ)
65	VALVE, BALL, 2" FPT 1500 • W.K.M. FIG. NO. 310
66	VALVE, BALL, 4" A.N.S.I. 600 • CAMERON W/MANUAL OPERATED GEARING AND HANDWHEEL (W/RTJ)
67	VALVE, BALL, 8" A.N.S.I. 600 • GROVE W/MANUAL OPERATED GEARING HANDWHEEL (W/RTJ)
68	VALVE, GLOBE, 1/2" FPT X 1/2" MPT 6000 • WHITEY TYPE 316SS
69	VALVE, TOM WHEATLEY SWING CHECK, 8" A.N.S.I. 600 • (RTJ/RTJ)
70	FLANGE, 2" A.N.S.I. 600• RTJWN
---	COATING "A" -- *3M Scotchkote 212*

THIS DWG. CURRENT THRU: 9-79

REFERENCE DRAWINGS

DRAWING NO.	TITLE	DRAWING NO.	TITLE
TO-F2-823X-1600-1	ALIGNMENT		
TO-F2-823X-1600-1B	PLATFORM A-336A DETAILS		

REVISIONS

NO.	DATE	REMARKS	RLY.	CKD.	APP.

Tennessee Gas Pipeline Company
Division of Tenneco Inc.
Engineering Department Houston, Texas

DRAWN BY D.L.	DATE 8-4-81	
CHECKED BY AMJ	DATE 10-9-81	
CORRECT BY RSM	DATE 11-5-81	
DESIGNED BY	DATE	
APPROVED BY HMM	DATE 11-6-81	
	SCALE SHOWN	
ISSUE DATES	ORIGINAL 2-28-82	
	LAST 2-28-82	

Removed 6-1983

PIPING DETAILS
H.I.O.S.-HIGH ISLAND BLK. A-336A PLATFORM
HIGH ISLAND AREA, GULF OF MEXICO

APPROVED BY J.P. Rathmell 11-11-81
ASST. CHIEF ENGINEER
TENNESSEE GAS PIPELINE CO
TO-F2-823X-1600-1B1

SN 5443

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
GULF OF MEXICO OCS REGION
1201 ELMWOOD PARK BOULEVARD
NEW ORLEANS, LOUISIANA 70123-2394

In Reply Refer To: LE-3-1
N. O. Misc. No. 014

November 30, 1989

$40.00

ACTION

Tennessee Gas Pipeline Company — Right-of-Way

MERGER AND CHANGE OF NAME RECOGNIZED

On October 17, 1989, there was filed in this office for approval evidence of merger of Tenneco Merger Company, an unqualified corporation, with and into Tenneco Inc., a Delaware corporation (N. O. Misc. No. 014), and, as of the date of the merger, Tenneco Inc. changed its name to Tennessee Gas Pipeline Company. The effective date of the merger and simultaneous change of name is December 8, 1987. The name of the surviving corporation is Tennessee Gas Pipeline Company and the qualification number assigned thereto is New Orleans Miscellaneous File Number 014.

In connection with the merger and change of name, the following evidence was received:

1. Agreement and Plan of Merger of Tenneco Merger Company with and into Tenneco Inc. under the name of Tennessee Gas Pipeline Company, duly certified by the Secretary of State of the State of Delaware on December 8, 1987, with additional certification by James Gaughan, Assistant Secretary of Tennessee Gas Pipeline Company, on June 7, 1989;

2. Certificate reflecting that Tennessee Gas Pipeline Company is duly incorporated under the laws of the State of Delaware and is in good standing, executed by the Secretary of State of the State of Delaware, on November 3, 1988;

3. Certificate reflecting that Tennesseee Gas Pipeline Company is incorporated under the laws of the State of Delaware and that it is authorized to hold pipeline rights of way and mineral leases on the Outer Continental Shelf, duly executed by Vincent F. Ewell, Jr., Assistant Secretary of Tennessee Gas Pipeline Company, on June 7, 1989;

4. Certificate listing the elected or appointed and now acting officers of Tennessee Gas Pipeline Company, duly executed by James Gaughan, Assistant Secretary of Tennessee Gas Pipeline Company, on June 7, 1989;

5. Copy of resolutions adopted at a meeting of the Board of Directors of Tennessee Gas Pipeline Company held on May 9, 1989, duly certified by James Gaughan, Assistant Secretary of Tennessee Gas Pipeline Company, on June 1, 1989;

6. Bond Rider to be attached to Outer Continental Shelf Right of Way Bond Number 61 S 33110-15-79 BCA changing the name of the principal to Tennessee Gas Pipeline Company, effective December 8, 1987;

7. Listing of the pipeline rights-of-way to be affected by the merger and change of name.

Since the transfer and vesting of property rights in the surviving corporation have been effected by State statutes by operation of law and not by individual conveyances, the merger and change of name are hereby approved insofar as they affect pipeline rights-of-way under 30 CFR 250. The change in ownership as to the pipeline rights-of-way listed below is recognized and the records so noted:

OCS-G NO.	OCS-G NO.	OCS-G NO.	OCS-G NO.	OCS-G NO.
0643	1345	1692	1854	2121-E
0643-A	1376	1702	1854-A	2123
0643-B	1382	1702-B	1854-B	2214
0643-C	1382-A	1702-C	1854-C	2214-A
0643-D	1383	1702-D	1854-E	2975
0649	1434	1702-E	1854-F	2975-A
0875	1434-A	1702-F	1854-G	3221
0877	1434-G	1702-H	1854-H	3221-A
0885	1434-H	1702-I	1854-I	3348
0886	1434-J	1702-K	1907-W	3349
0887	1434-K	1702-L	1950-J	3350
0887-A	1461	1702-M	1950-L	3355
0889	1464	1702-O	1992	3357
0891	1464-A	1702-P	2121	3358
0891-A	1683	1702-Q	2121-A	3360
0892	1684	1702-R	2121-B	3437
0895	1687-S	1702-S	2121-C	3449
1320	1687-T	1702-T	2121-D	3451

OCS-G NO.	OCS-G NO.	OCS-G NO.	OCS-G NO.	OCS-G NO.
3455	4028	4290	4855	7109
3613	4030	4291	4977	7535
3614	4040	4306	5135	7536
3626	4043	4308	5136	7552
3633	4061	4309	5137	7554
3638	4150	4340	5141	7575
3644	4154	4341	5152	7576
3648	4158	4373	5157	7587
3652	4160	4374	5232	8046
3828	4161	4526	5253	8047
3837	4169	4603	5259	8050
3845	4171	4605	5933	8056
3848	4173	4608	5937	8057
3851	4276	4609	6381	8527
3852	4282	4613	6546	8617
3855	4283	4641	7096	10396
3861	4284	4644	7104	11165
3862	4287	4686	7107	11174

J. Rogers Pearcy
Regional Director

cc: Associates
Case Files
Qualification File (N. O. Misc. No. 014)

SN5443

BEST AVAILABLE COPY

MAY 23 1984

In Reply Refer To: RP-2-2
OCS-G 4040

ACTION

Tenneco Inc.	:	Pipe Line Right-of-Way
	:	
	:	Date of Permit: 8/14/79
	:	
	:	Decision Requesting Proof of Construction Dated:
	:	
	:	Proof of Construction Received: 5/4/84

Proof of Construction Accepted

The above-captioned grantee has submitted the evidence required by the law and Regulations 30 CFR 256.95(a). The proof of construction is hereby accepted and approved. Deviation from the original plat has been noted and new plat made a part of the record.

Because grantee has deviated from the approved right-of-way by ±25 feet in Block A-343, High Island Area, East Addition, South Extension, Tenneco Inc. must notify Exxon Corporation, operator of Lease OCS-G 2741, to that effect. A return-receipt-card or letter from Exxon Corporation evidencing proof of notice must be submitted to this office within 60 days of receipt hereof. The total length of the "as-built" 8 5/8-inch pipeline right-of-way is 1.66 miles.

(Orig. Sgd.) John L. Rankin

John L. Rankin
Regional Manager

CERTIFIED MAIL NO. P21 4379111

bcc: P/L OCS-G 4040 (LE)
P/L OCS-G 4040 (w/attachments) (RP-2-2)
RM Reading File

ABritton:lv:5/21/84:Disk 6

already on hand as 'as-built'
KT
7/3/84

Tennessee Gas Pipeline
Division of Tenneco Inc.

P.O. Drawer 53388
Lafayette, Louisiana 70505
(318) 233-7802

April 2, 1984

Minerals Management Service
Rules and Production (RP-2-2)
Mr. D. W. Solanas, Regional Supervisor
P. O. Box 7944
Metairie, Louisiana 70010

Re: Proof of Construction
OCS-G 4040 Pipeline Right of Way
High Island Area (Gulf of Mexico)
High Island Blk. 336-B Line

Dear Mr. Solanas:

On August 7, 1979, application for pipeline right of way was approved and permit issued for the construction of a ten inch (10") natural gas pipeline in the High Island area, Gulf of Mexico, Louisiana.

In accordance with regulations 43 CFR 3340.3, we attach herewith, in triplicate, the as-constructed drawing No. TO-F2-823X-1600-1, showing the deviation from the right of way as originally planned and submitted, along with duplicate copies of hydrostatic test data.

If there is any additional information needed pertaining to this matter, please advise.

Yours very truly,

R. S. Perot
Assistant Division
Right of Way Supervisor

RSP/jsb
Enclosure

cc: R. L. Sanderson
H. M. McLeod
R. E. Lyons
J. C. Broome, III
R. G. Robertson
J. D. DeBlieux
F. J. Millette, Jr.
File

GT 4207 3/71

1 — TGP (COMPANY) SHEET 1 OF 1 #293

NOTE: SEE PROCEDURE TGT 6-129 FOR INSTRUCTIONS

PIPE TEST REPORT OCS-G 4040 823X-1600

C.O. NO.	DISTRICT	LINE NO.	SPREAD	SECTION	DATE
46673	823	823X-1600	CHICKASAW	I	9-9-79

DRAWING NO.	LOCATION FROM MLV	TO MLV	SECTION TESTED FROM STA.	TO STA.	FOOTAGE
TE-F2-823X-1600-1	823X-1601	823X-1602	0+91	94+60.2	8801.9 Line 567.3 Riser Pad

NOMINAL PIPE SIZE O.D.	W.T.	GRADE	MFR.
8.625 IN.	.406 IN.	B	U.S.S.

100% S.M.Y.S. PRESSURE	M.A.O.P.	PIPELINE CONTRACTOR
3297 PSIG	PSIG	SANTA FE

HYDROSTATIC TEST CONTRACTOR	PROJECT MANAGER
SANTE FE	GEORGE GERNON

COMPANY PERSONNEL INVOLVED

1 TENNESSEE GAS INSPECTOR - L.R. SLOWIK George Benoit

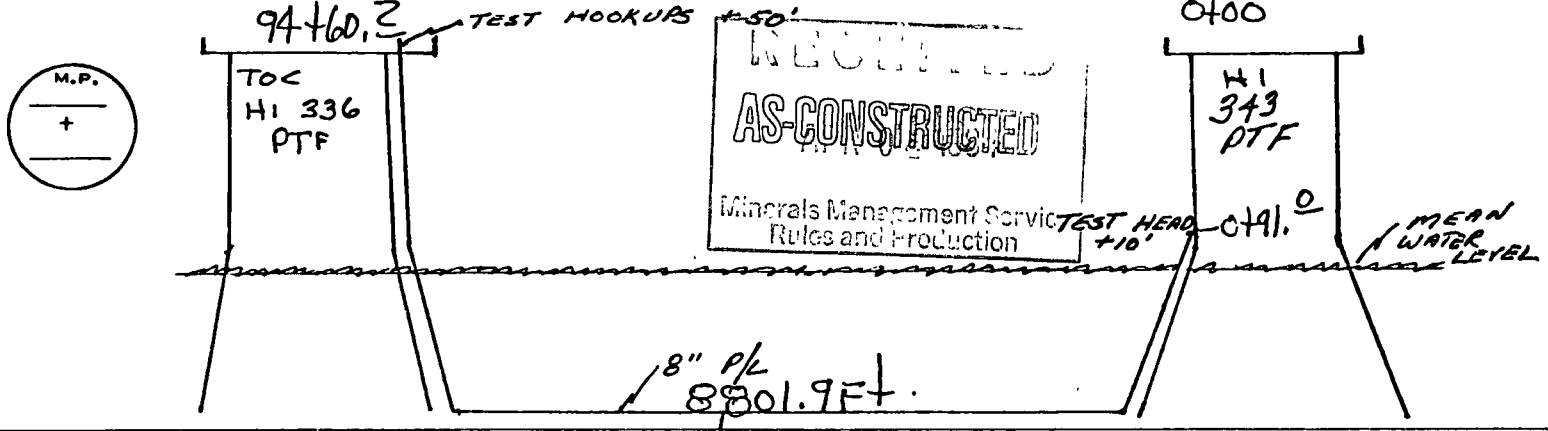
TEST MEDIUM (WATER, GAS, AIR, OTHER)

SEAWATER

	END OF TEST SECTION	PRESSURE POINT	HIGH ELEVATION	LOW ELEVATION	END OF TEST SECTION
MAP PLUS	94+60.2	0+91.0	94+60.2	0+80.0	0+91.0
ELEVATION (FEET)	+50	+11	+50	0	+11
TEST PRESSURE (PSI)	2165	2169.9	2165	2187	2169.9
% S.M.Y.S	65.6%	65.8%	65.6%	66.3%	65.8%

TEST SKETCH (ATTACH ADDITIONAL SKETCH SHEET IF NECESSARY) → FLOW

TEST SECTION NO. 0+00



USEFUL CONVERSION FACTORS: • 1 FOOT OF WATER = .433 PSI • 1 PSI = 2.31 FEET OF WATER	WATER SOURCE	MILE POST	WATER SOURCE TEMPERATURE
	SEA WATER		

DEVIATION DATA (OBSERVED AT PRESSURE PT)		PRESSURE		
	INITIAL DEVIATION:	PSIG	% S.M.Y.S.	
	FINAL DEVIATION:	PRESSURE PSIG	% S.M.Y.S.	DEVIATION PSI

FAILURE DATA (OBSERVED AT FAILURE PT)	DATE	TIME	A.M. P.M.	MAP STATION	ELEVATION	FAILURE PRESSURE PSIG	% S.M.Y.S.
	DESCRIPTION (ATTACH SKETCH OR PHOTO)			REPAIRS MADE (USE BACK IF NEEDED)			

☐ ALL TIE-IN WELDS WERE NONDESTRUCTIVELY TESTED METHOD: BY

ELEVATION DATA DERIVED FROM PROFILE SHEET TE- OR U.S.G.S. QUAD SHEET:

TEST REJECTED	TEST ACCEPTED	DATE
NOTE: SEE ABOVE FAILURE DATA	TEST INSPECTOR SIGNATURE: L.R. Slowik	9-9-79
SIGNATURE:	DISTRICT SIGNATURE: S.P. Gentry	11/20/79
DATE:	DIVISION SIGNATURE: P.H. Robertson	11-26-79
	AGENCY SIGNATURE:	

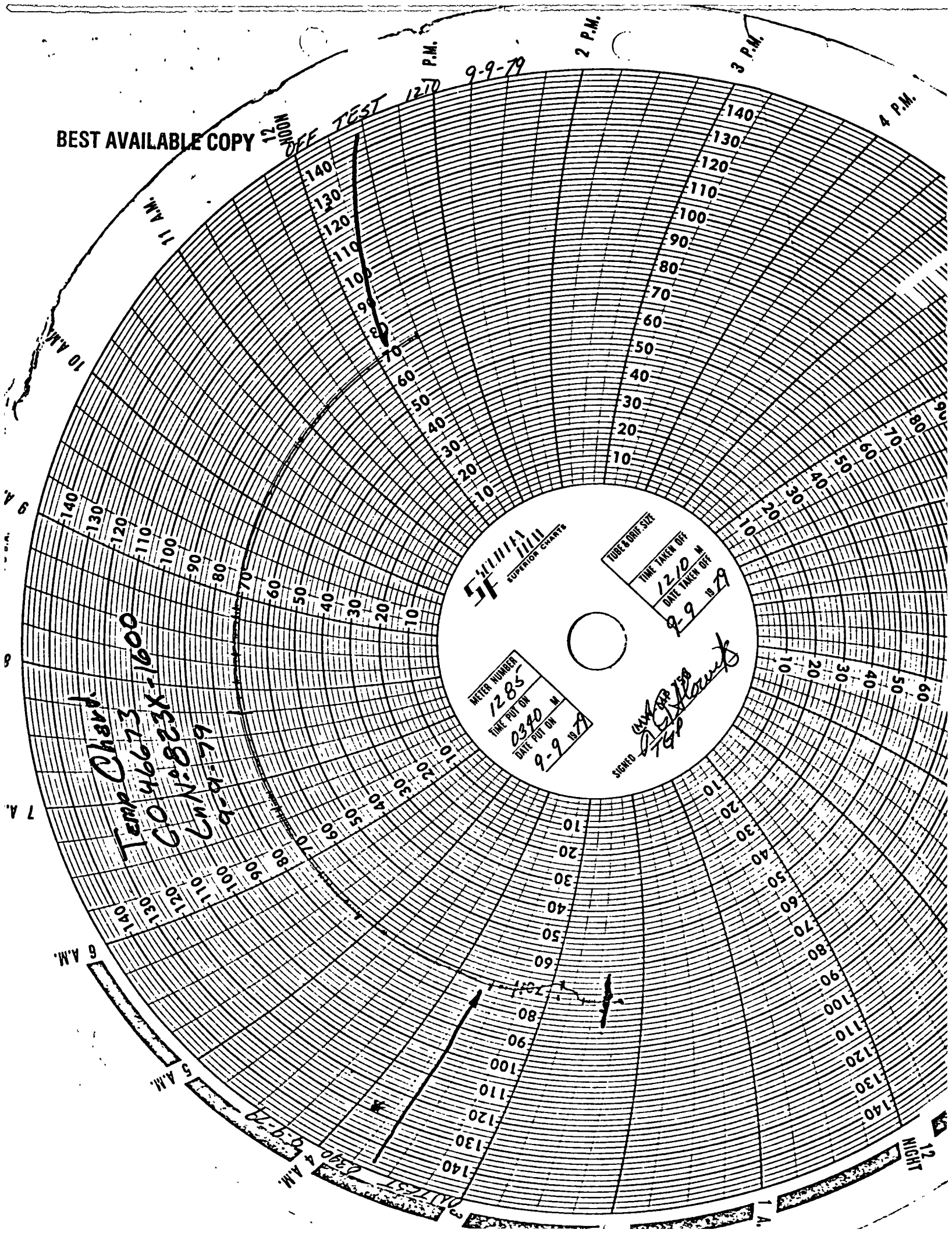
IGT 4207 8/71

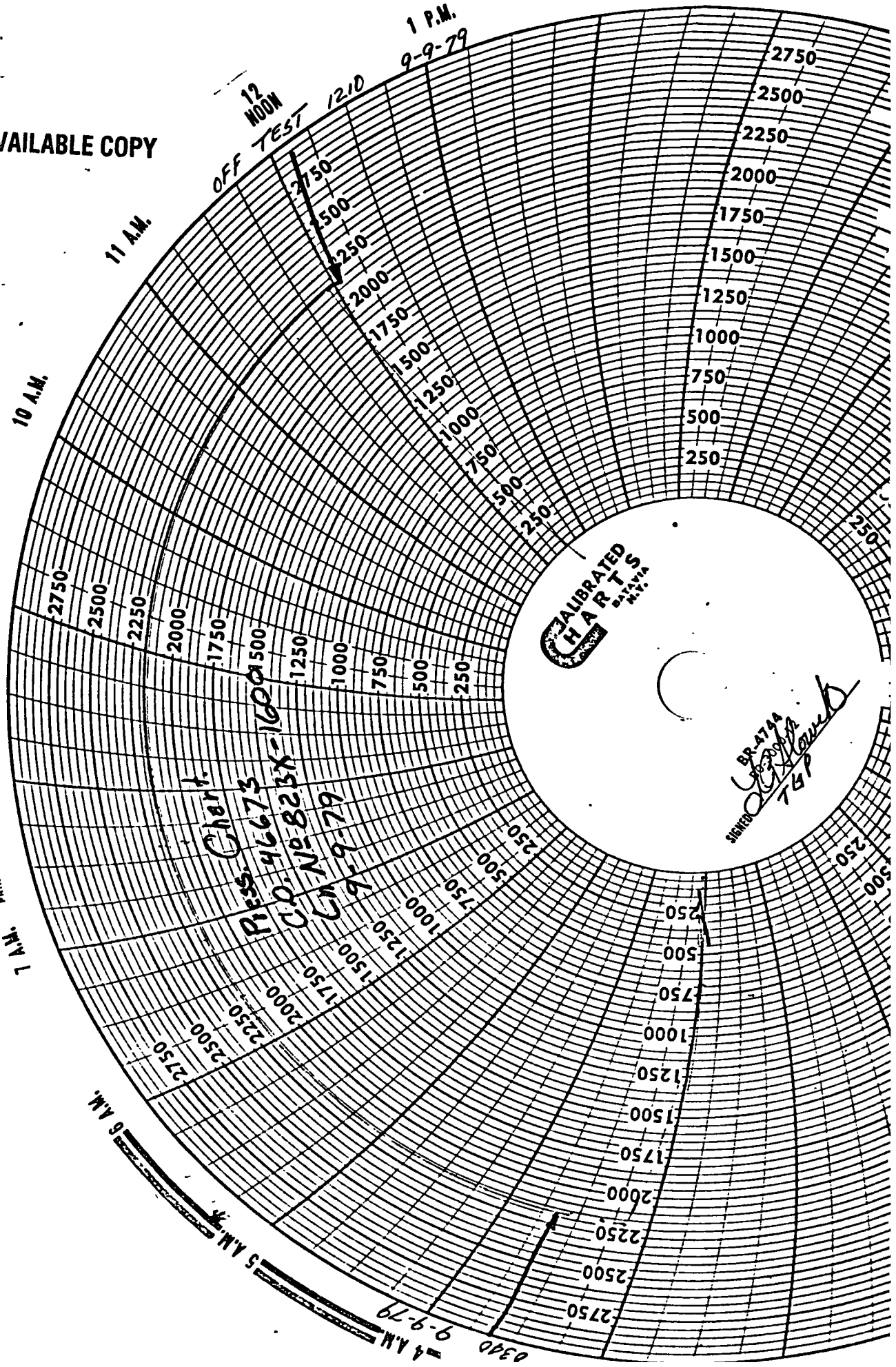
TA OF TEST PRESSURES

DATE	TIME	DEAD WEIGHT	TEMPERATURE		REMARKS: (TEST, WEATHER, BLEED OFF, OFF TEST, NO. OF STROKES FOR REPRESSURE, ETC.)
			TEST WATER	AMBIENT	
9-9-79	0340	2170	72°	80°	BEGIN TEST
	0410	2170	72°	80°	
	0440	2170	72°	80°	WEATHER: CLOUDY
	0510	2167	72°	80°	WIND : 10-20 MPH
	0540	2167	72°	80°	SEAS : 6'-8'
	0610	2167	71°	80°	
	0640	2167	71°	80°	
	0710	2165	71°	80°	
	0740	2165	71°	80°	
	0810	2165	71°	80°	
	0840	2165	71°	80°	
	0910	2165	71°	80°	
	0940	2165	71°	80°	
	1010	2165	71°	80°	
	1040	2165	71°	60°	
	1110	2165	71°	80°	
	1140	2165	71°	80°	
9-9-79	1210	2165	71°	80°	END TEST
					- DID NOT HAVE TO REPRESSURE
					- TEST ACCEPTED

COMMENTS:

Deadweight CHANDLER S/N 11075
Press. Recorder American S/N PR 52289
Temp Recorder Barton S/N 1285





TGT 4207 8/73

TENNESSEE GAS (COMPANY)

SHEET ____ OF ____

NOTE: SEE PROCEDURE TGT 6-129 FOR INSTRUCTIONS

PIPE TEST REPORT OCS-G 4040 823X-1600

C.O. NO.	DISTRICT	LINE NO.	SPREAD	SECTION	DATE
46673	823	823X-1600	YARD Santa Fe	III	8-31-79

DRAWING NO.	LOCATION FROM MLV	TO MLV	SECTION TESTED FROM STA.	TO STA.	FOOTAGE
TE-F2-823X-1600-HB	YARD		YARD		35 FT.

NOMINAL PIPE:	SIZE O.D.	W.T.	GRADE	MFR.
	16 IN.	.500 IN.	X 52	U.S.S.

100% S.M.Y.S. PRESSURE	M.A.O.P.	PIPELINE CONTRACTOR
3250 PSIG	PSIG	Santa Fe ENGR. & CONST.

HYDROSTATIC TEST CONTRACTOR	PROJECT MANAGER
Santa Fe ENGR. & CONST.	GEORGE GERWIN

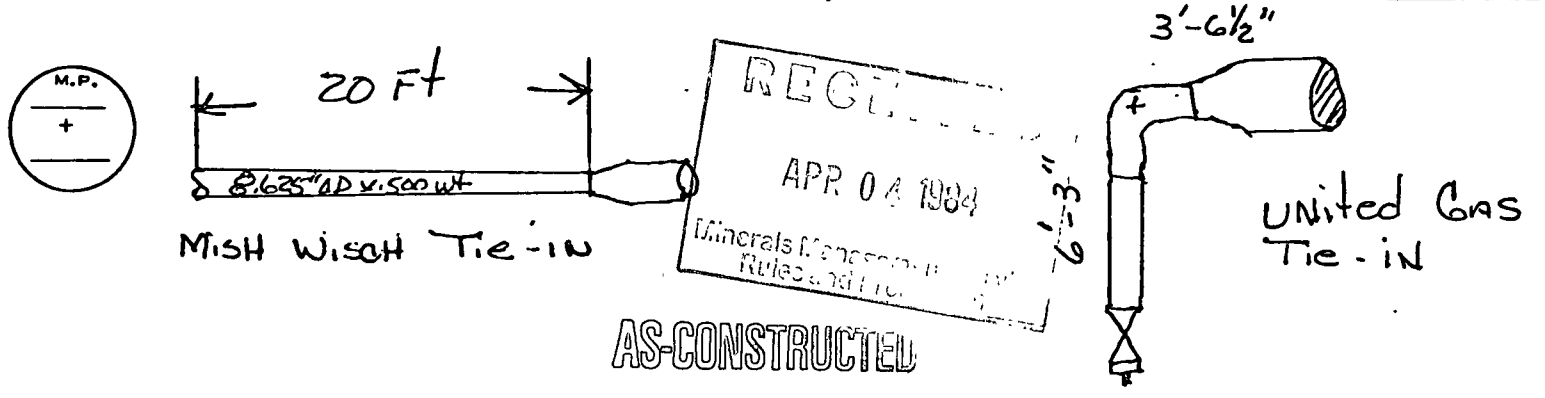
COMPANY PERSONNEL INVOLVED: A.E. White

TEST MEDIUM (WATER, GAS, AIR, OTHER): FRESH WATER

	END OF TEST SECTION	PRESSURE POINT	HIGH ELEVATION	LOW ELEVATION	END OF TEST SECTION
MAP PLUS		YARD	Tested	Pipe	
ELEVATION (FEET)					
TEST PRESSURE (PSI)	2160	2160	2160	2160	2160
% S.M.Y.S	66.4%	66.4%	66.4%	66.4%	66.4%

TEST SKETCH (ATTACH ADDITIONAL SKETCH SHEET IF NECESSARY) → FLOW

TEST SECTION NO. ____



USEFUL CONVERSION FACTORS: • 1 FOOT OF WATER = .433 PSI • 1 PSI = 2.31 FEET OF WATER	WATER SOURCE	MILE POST	WATER SOURCE TEMPERATURE

DEVIATION DATA (OBSERVED AT PRESSURE PT)		PRESSURE		
	INITIAL DEVIATION:	PSIG	% S.M.Y.S.	
	FINAL DEVIATION:	PRESSURE PSIG	% S.M.Y.S.	DEVIATION PSI

FAILURE DATA (OBSERVED AT FAILURE PT)	DATE	TIME	A.M. P.M.	MAP STATION	ELEVATION	FAILURE PRESSURE PSIG	% S.M.Y.S.
	DESCRIPTION (ATTACH SKETCH OR PHOTO)			REPAIRS MADE (USE BACK IF NEEDED)			

☐ ALL TIE-IN WELDS WERE NONDESTRUCTIVELY TESTED METHOD: ____ BY ____

ELEVATION DATA DERIVED FROM PROFILE SHEET TE- OR U.S G.S. QUAD SHEET:

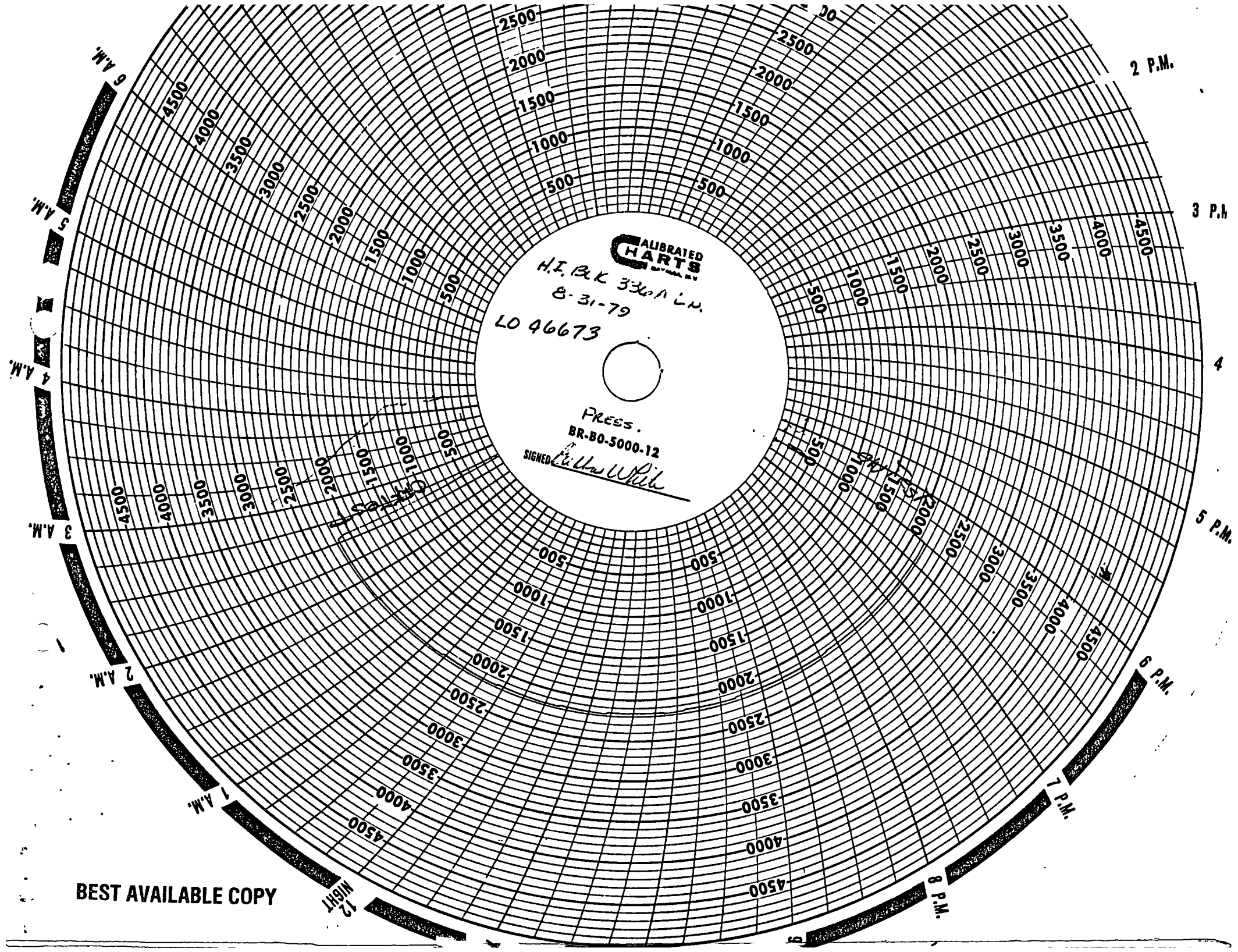
TEST REJECTED	TEST ACCEPTED	DATE
NOTE: SEE ABOVE FAILURE DATA	TEST INSPECTOR SIGNATURE: A.E. White	8-31-79
BEST AVAILABLE COPY	DISTRICT SIGNATURE: S.B. Autrey	11/20/79
SIGNATURE: ____	DIVISION SIGNATURE: L.G. Robertson	11-26-79
DATE: ____	AGENCY SIGNATURE:	

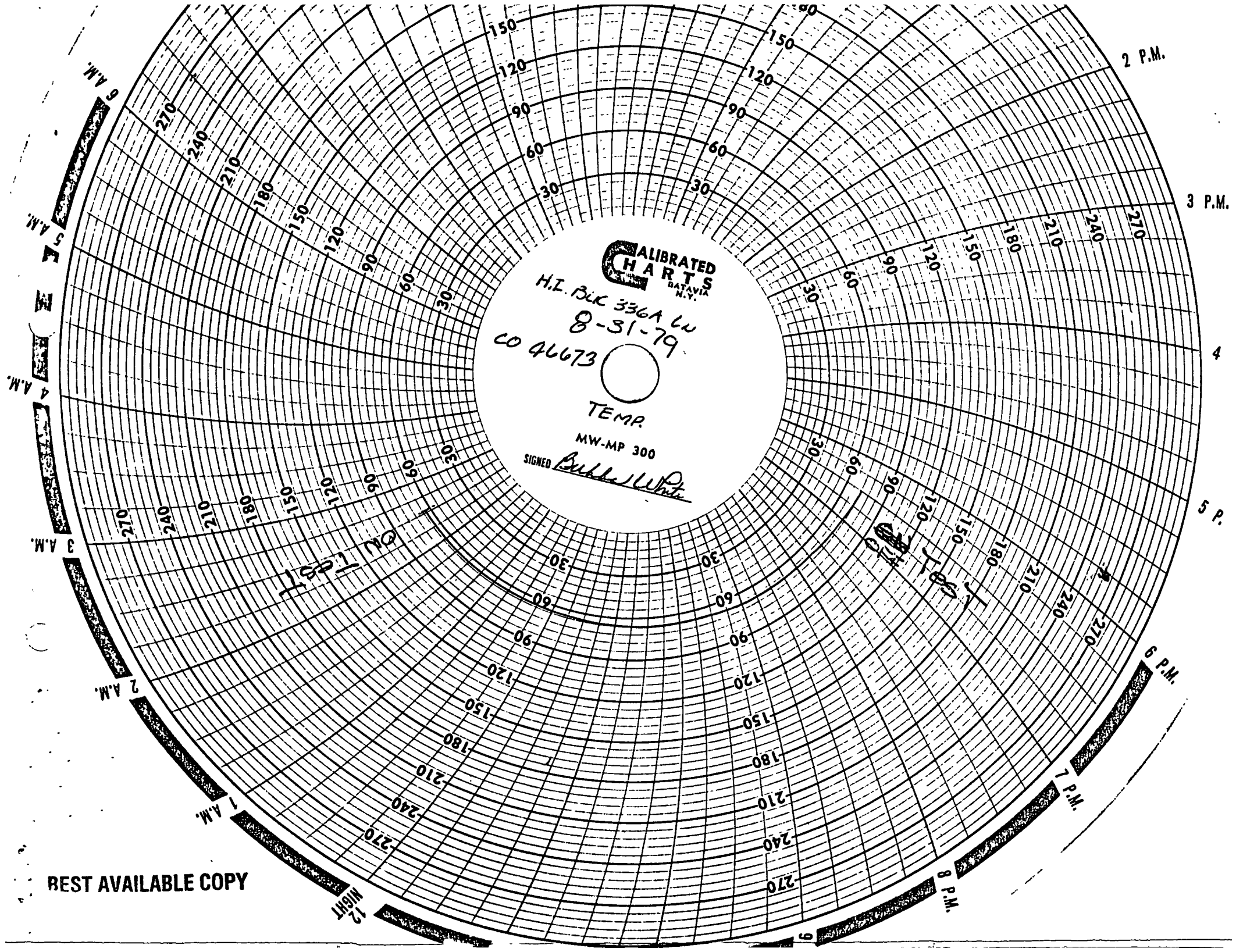
FGT 420 8/71

TABLE OF TEST PRESSURES

DATE	TIME	DEAD WEIGHT	TEMPERATURE		REMARKS: (ON TEST, WEATHER, BLEED OFF, OFF TEST, NO. OF STROKES FOR REPRESSURE, ETC.)
			TEST WATER	AMBIENT	
8/31/79	1830	2174	66°	88°	BEGIN TEST
	1845	2174	66°	88°	
	1900	2174	66°	88°	
	1915	2172	66°	87°	
	1930	2170	66°	85°	
	1945	2168	66°	85°	
	2000	2169	66°	84°	REPRESSURE 2161 - 2175
	2015	2175	66°	84°	
	2030	2173	66°	84°	
	2045	2173	66°	84°	
	2100	2167	66°	82°	
	2115	2169	66°	82°	REPRESSURE 2163 - 2179
	2130	2170	66°	82°	
	2145	2166	66°	82°	2162 - 2173
	2200	2175	66°	82°	
	2215	2166	66°	81°	2170 - 2175
	2230	2163	66°	81°	
	2245	2161	66°	80°	2160 - 2165
	2300	2171	66°	80°	2160 - 2175
	2315	2163	65°	80°	
	2330	2175	65°	80°	2160 - 2175
	2345	2169	65°	80°	
9-1-79	2400	2161	65°	80°	
	0015	2170	65°	80°	2160 - 2175
	0030	2166	65°	80°	
	0045	2160	65°	80°	
	0100	2175	65°	80°	2160 - 2175
	0115	2172	65°	80°	
	0130	2166	65°	80°	
	0145	2160	65°	80°	2160 - 2175
	0200	2173	65°	80°	
	0215	2168	65°	80°	
	0230	2164	65°	80°	END OF TEST

COMMENTS:





NOTE: 2½ FT 16" O.D. X .500" PIPE, 16" X 8" REDUCER & 12 FT. 8" X .500" WALL PIPE TESTED FOR TGP. TIE-IN AT SAME TIME 2160# 8-31-79

GENERAL NOTES:

1) [illegible]

2) [illegible]

3) [illegible]

4) [illegible]

5) [illegible]

GT 4207 5/71

TE-N. GAS PL. CO. (COMPANY) SHEET 1 OF 1

DTE: SEE PROCEDURE TGT 6.129 FOR INSTRUCTIONS

PIPE TEST REPORT QS-6464 TEST 823X-1600 #2 of 3

C.O. NO.	DISTRICT	LINE NO.	SPREAD	SECTION	DATE
46673	823	823X-1600	YARD		AUG. 22 1979

DRAWING NO.	LOCATION FROM MLV	LOCATION TO MLV	SECTION TESTED FROM STA.	SECTION TESTED TO STA.	FOOTAGE
TE-F2 823X-1602-1					

NOMINAL PIPE:	SIZE O.D.	W.T.	GRADE	MFR.
	12.750 IN.	.500 IN.	X-42	

100% S.M.Y.S. PRESSURE	M.A.O.P.	PIPELINE CONTRACTOR
3294 PSIG	PSIG	SANTA FE

HYDROSTATIC TEST CONTRACTOR	PROJECT MANAGER
SANTA FE	GEORGE GERNON

COMPANY PERSONNEL INVOLVED: KEITH KIRKLAND

TEST MEDIUM (WATER, GAS, AIR, OTHER): WATER

	END OF TEST SECTION	PRESSURE POINT	HIGH ELEVATION	LOW ELEVATION	END OF TEST SECTION
MAP PLUS	0	0	0	0	0
ELEVATION (FEET)	0	0	0	0	0
TEST PRESSURE (PSI)	2161	2161	2161	2161	2161
% S.M.Y.S	66	66	66	66	66

TEST SKETCH (ATTACH ADDITIONAL SKETCH SHEET IF NECESSARY) ——→ FLOW TEST SECTION NO. _____

M.P. + _____

FOR DETAILS SEE DRAWING 823X-1602-1

USEFUL CONVERSION FACTORS: • 1 FOOT OF WATER = .433 PSI • 1 PSI = 2.31 FEET OF WATER

WATER SOURCE	MILE POST	WATER SOURCE TEMPERATURE
CITY TAP	N-A.	70°

DEVIATION DATA (OBSERVED AT PRESSURE PT)

	PRESSURE		
INITIAL DEVIATION:	PSIG	% S.M.Y.S.	
FINAL DEVIATION:	PSIG	% S.M.Y.S.	DEVIATION PSI

FAILURE DATA (OBSERVED AT FAILURE PT)

DATE	TIME	A.M. P.M.	MAP STATION	ELEVATION	FAILURE PRESSURE PSIG	% S.M.Y.S.

DESCRIPTION (ATTACH SKETCH OR PHOTO) | REPAIRS MADE (USE BACK IF NEEDED)

☐ ALL TIE-IN WELDS WERE NONDESTRUCTIVELY TESTED METHOD: BY

ELEVATION DATA DERIVED FROM PROFILE SHEET TE- OR U.S.G.S. QUAD SHEET:

TEST REJECTED ☐ TEST ACCEPTED ☐

NOTE: SEE ABOVE FAILURE DATA

SIGNATURE: BEST AVAILABLE COPY

DATE: _____

	DATE
TEST INSPECTOR SIGNATURE: Keith Kirkland	8/22/79
DISTRICT SIGNATURE: S.L. Autry	11/20/79
DIVISION SIGNATURE: L.G. Robertson	11-26-79
AGENCY SIGNATURE:	

TGT 4207 3/P1

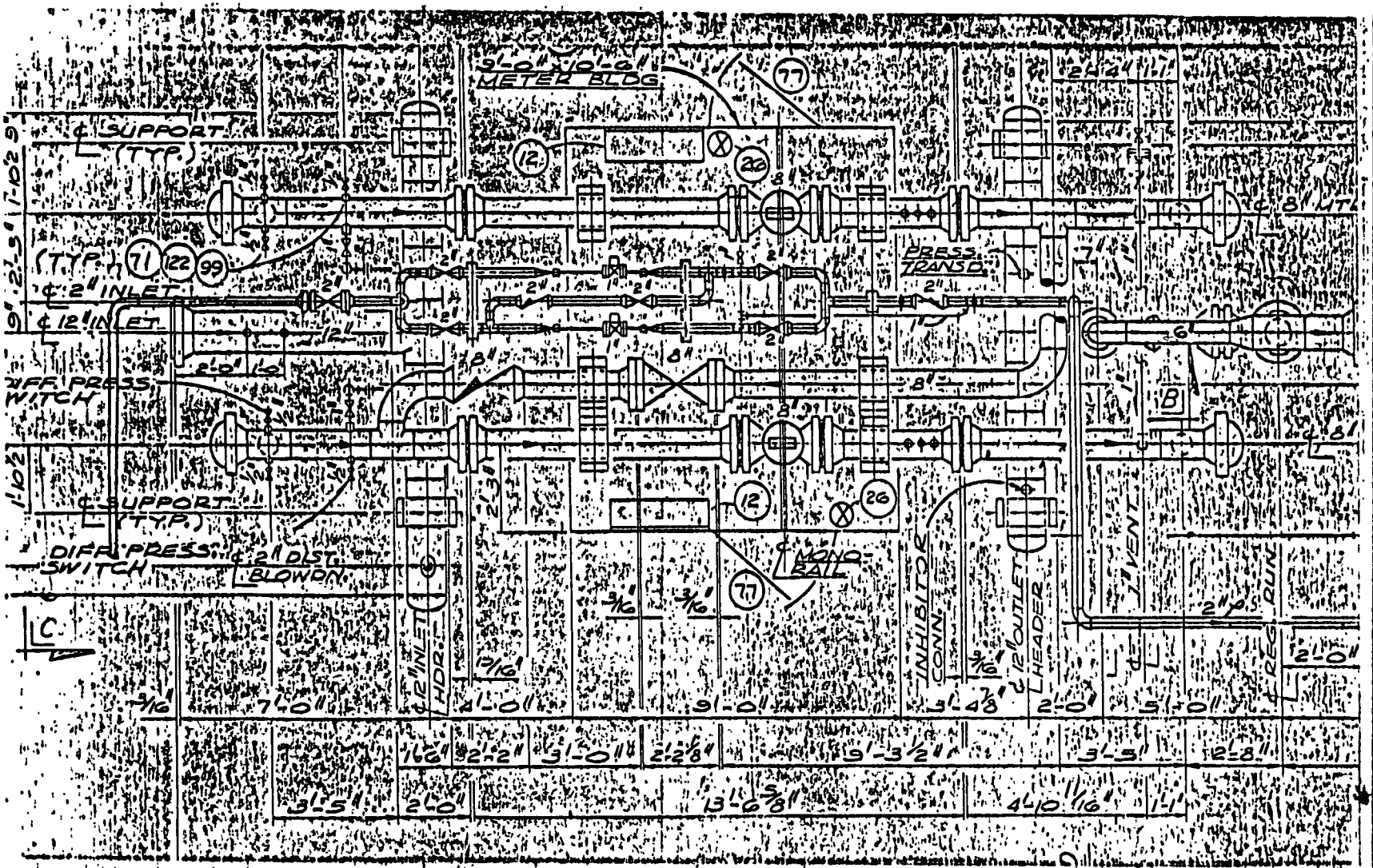
TABLE OF TEST PRESSURES

DATE	TIME	DEAD WEIGHT	TEMPERATURE		REMARKS: (ON TEST, WEATHER, BLEED OFF, OFF TEST, NO. OF STROKES FOR REPRESSURE, ETC.)
			TEST WATER	AMBIENT	
	~~4:45~~				Test slab started at 4:50 P.M
					Ends at 8:50 P.M
8/22/79	4:50 P.M	2174	70°	86°	
	5:00	2167	70°	85°	
	5:15	2169	70°	83°	
	5:30	2164	70°	82°	
	5:45	2169	69°	82°	
	6:00	2163	68°	82°	
	6:15	2168	68°	82°	
	6:30	2166	68°	82°	
	6:45	2164	66°	80°	
	7:00	2166	64°	80°	
	7:15	2167	62°	80°	
	7:30	2175	60°	80°	
	7:45	2164	60°	80°	
	8:00	2173	60°	80°	
	8:15	2163	60°	79°	
	8:30	2168	60°	79°	
	8:45	2161	60°	79°	
	9:00 P.M	2161	60°	79°	End of test

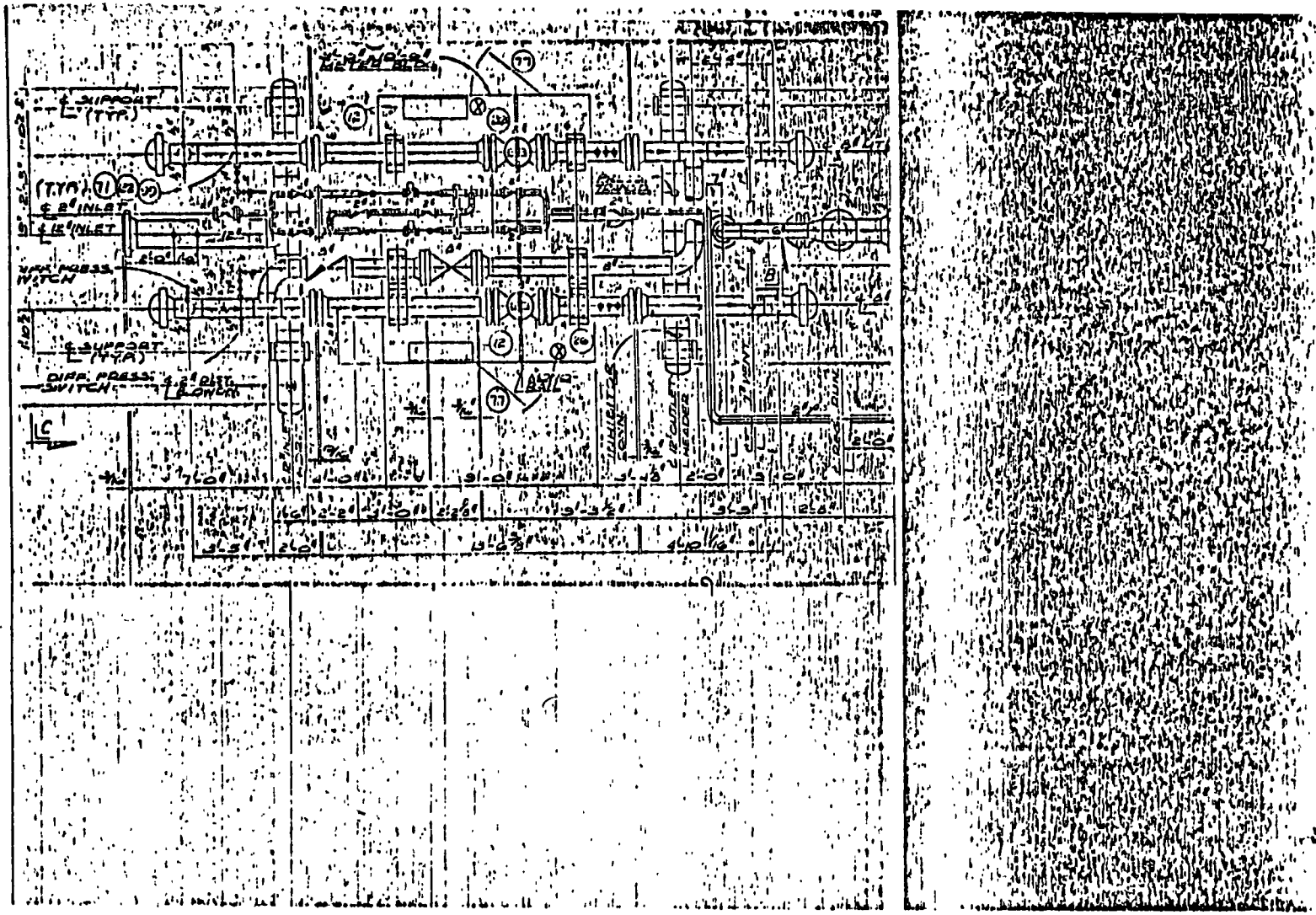
COMMENTS:

Deadweight name Chandler Engineering # 11074 1/3/79
Pressure Recorder Barton # 242A-9012 Calibrated 6/8/79
Temp Recorder Bad Barton # 242A-4163 Calibrated 5/30/79

Andy Cotton



BEST AVAILABLE COPY



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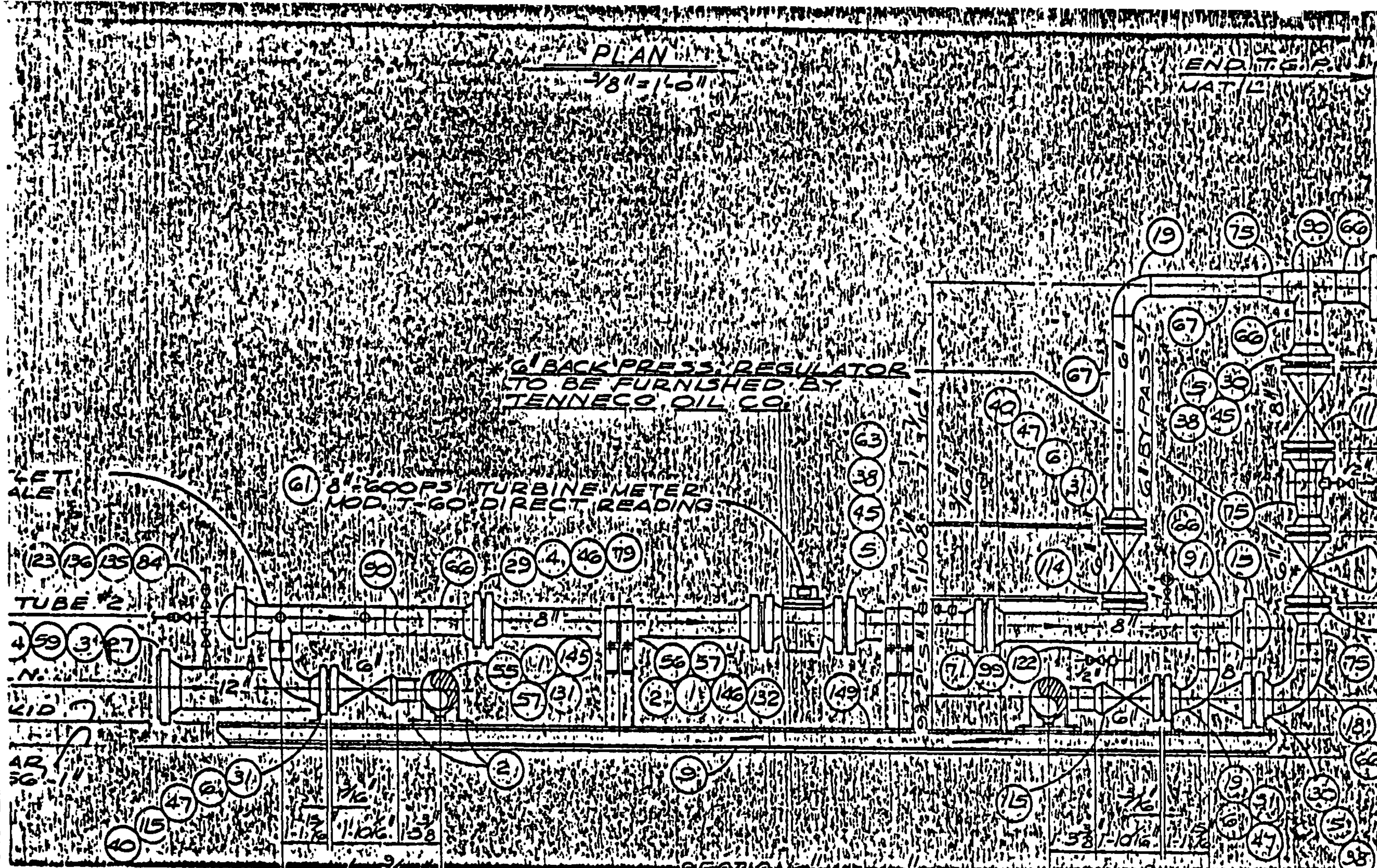
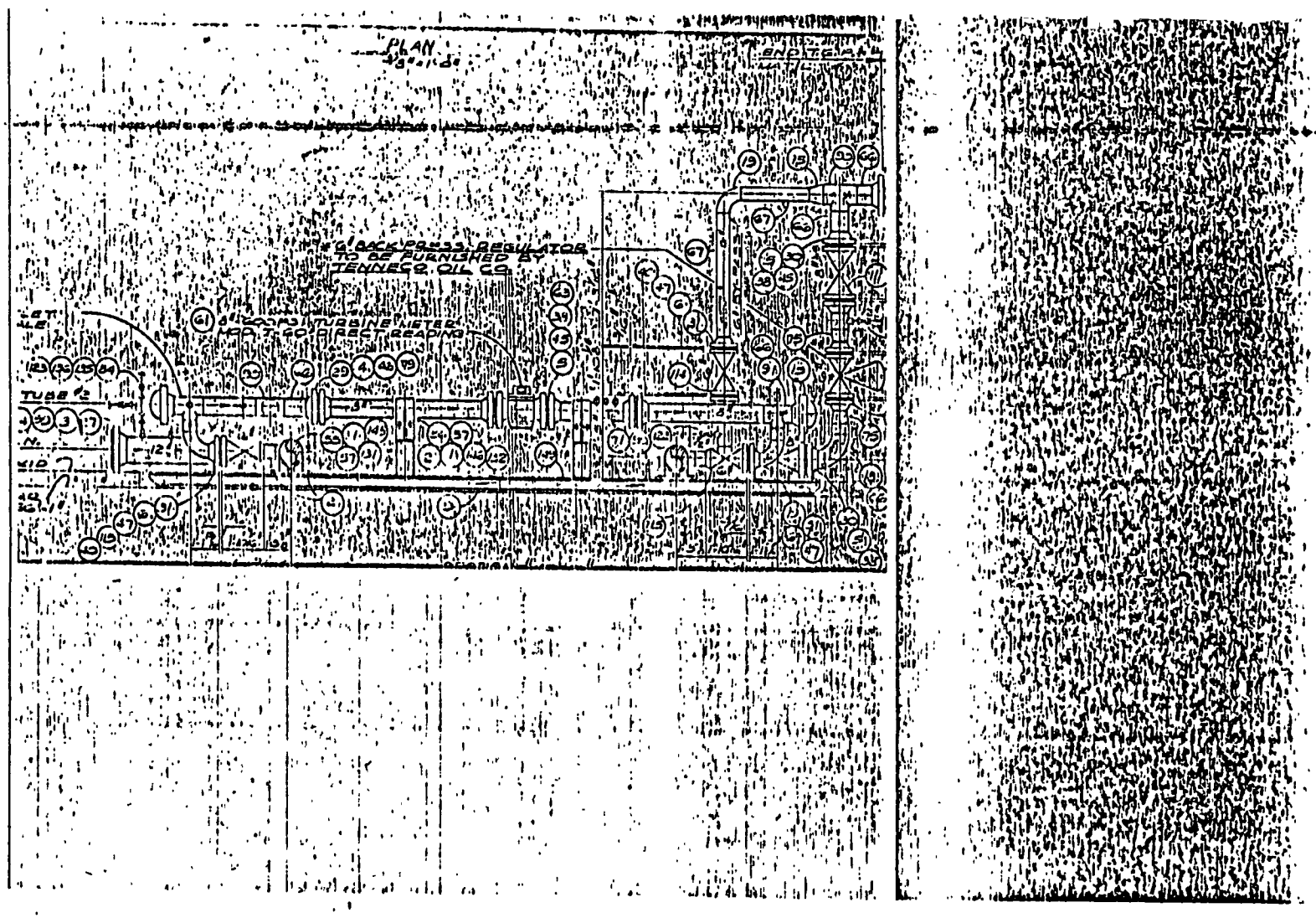
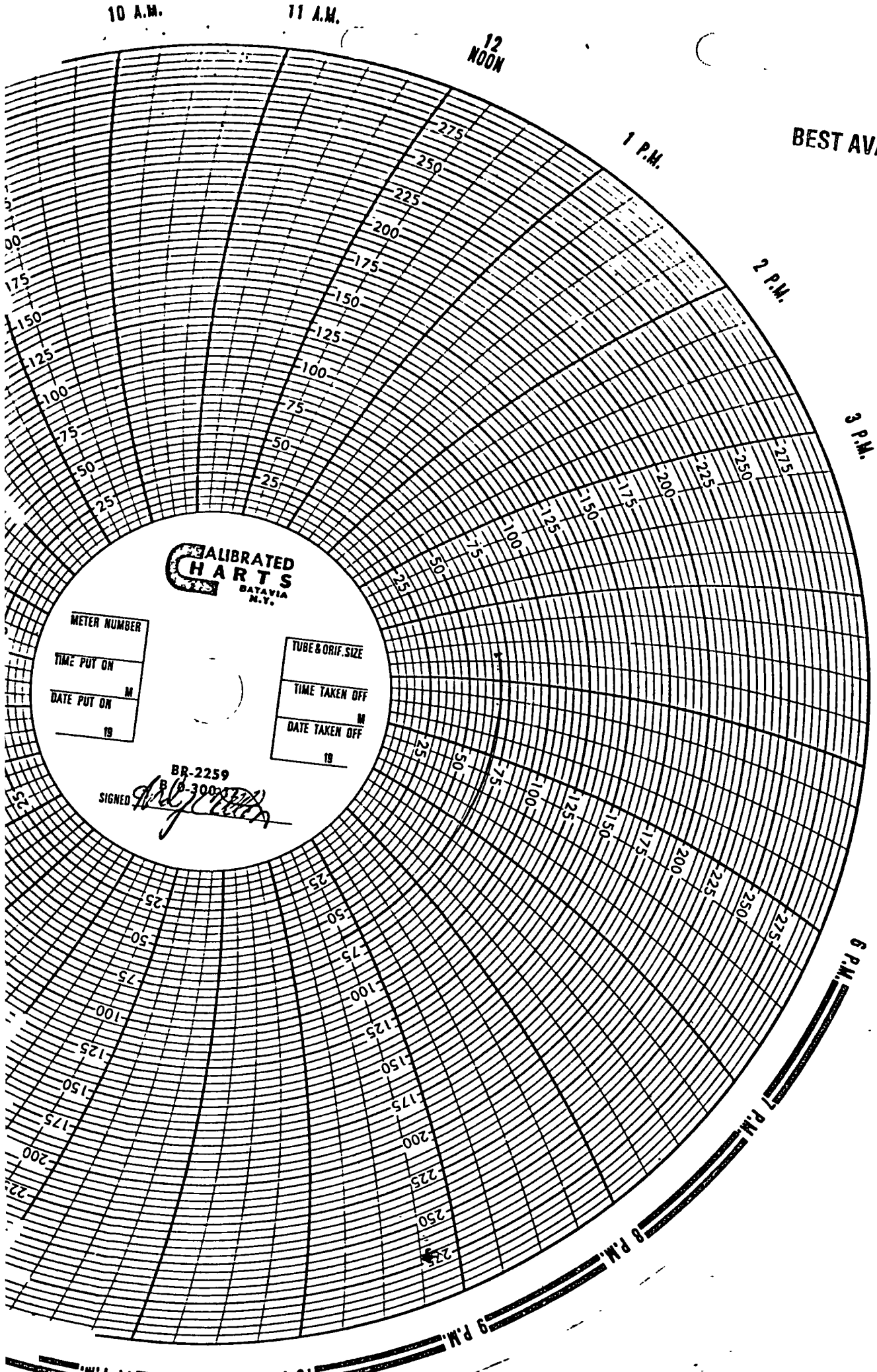
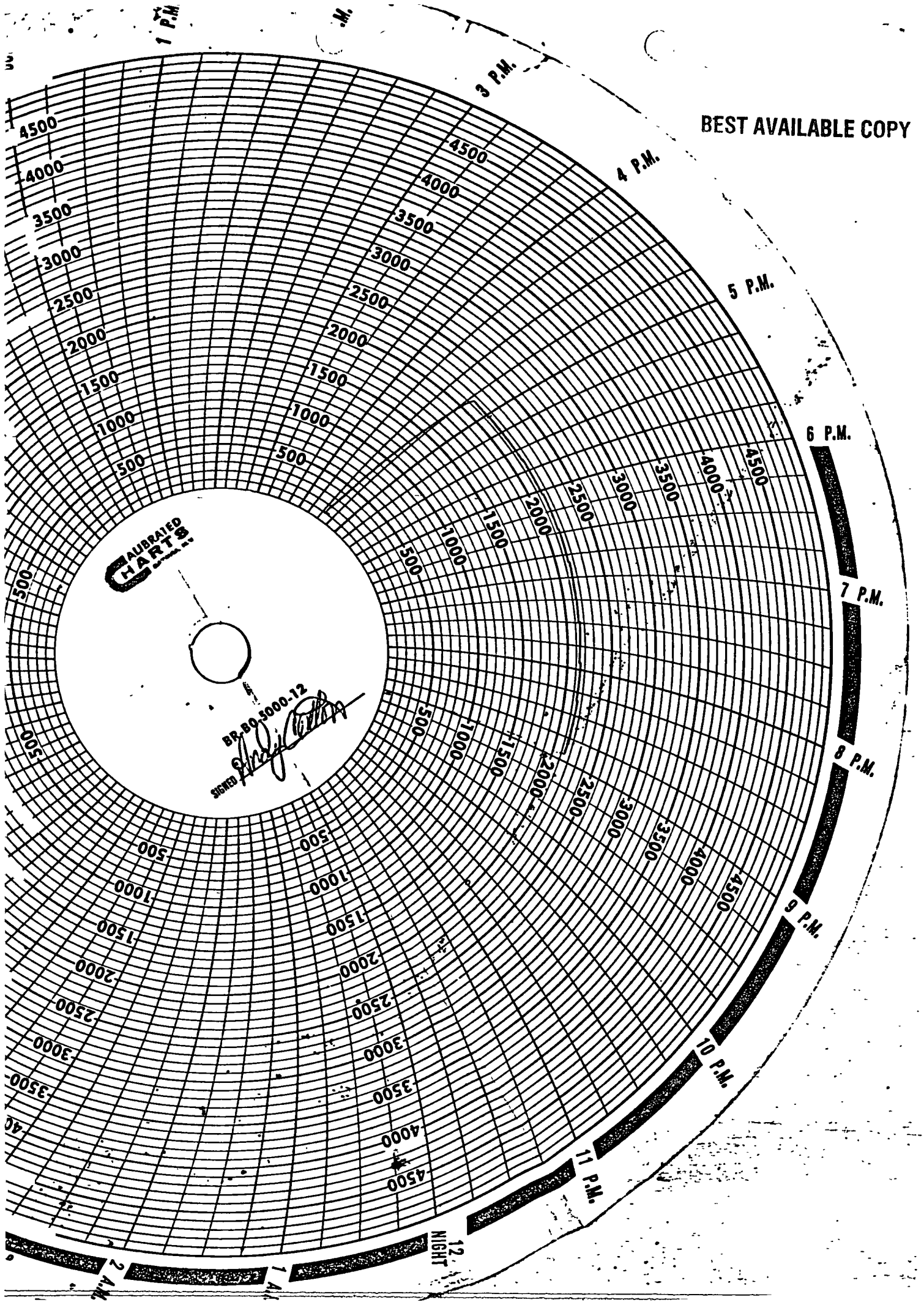




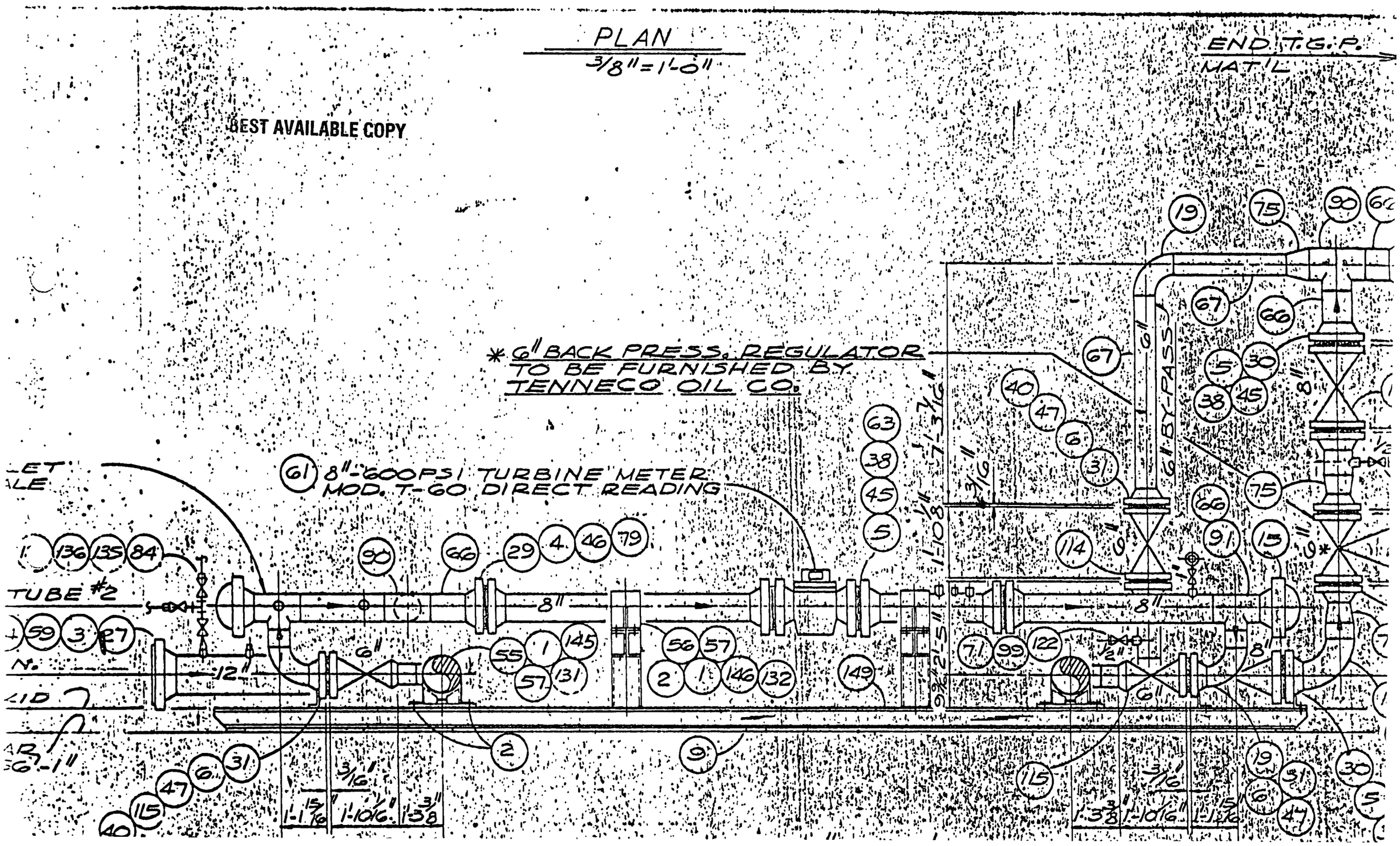




PLAN

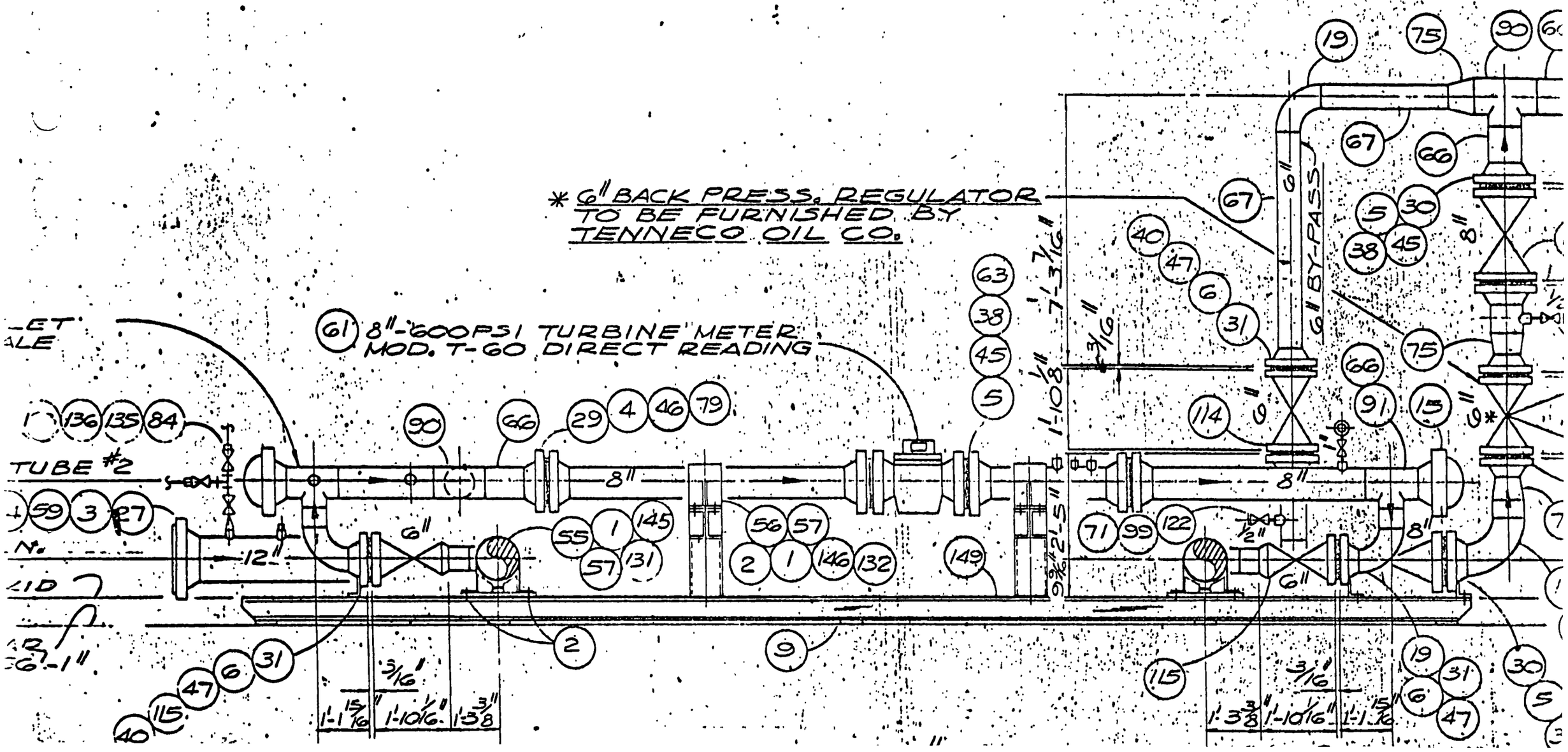
3/8" = 1'-0"

END T.G.P. MAT'L



PLAN
3/8" = 1'-0"

END T.G.P. =
MAT'L



TGT 4209 3/71

NOTE: SEE PROCEDURE TGT 6-129 FOR INSTRUCTIONS

Te. n. Gas Pipeline (COMPANY) SHEET 2 OF 2

PIPE TEST REPORT OCS-G4040 823X-1600

C.O. NO.	DISTRICT	LINE NO.	SPREAD	SECTION	DATE
46673	823	823X-1600	Santa Fe	II	7-28-79

DRAWING NO.	LOCATION	SECTION TESTED	FOOTAGE
TE-F2-823X-1600-1D -1B1	FROM MLV Yard TO MLV	FROM STA. YARD TO STA.	

NOMINAL PIPE:	SIZE O.D.	W.T.	GRADE	MFR.
TE-F2-823X-1602-1	8.625 IN.	.500 IN.	B	Youngstown Steel

100% S.M.Y.S. PRESSURE	M.A.O.P.	PIPELINE CONTRACTOR
4057 PSIG	PSIG	Santa Fe Const. Co.

HYDROSTATIC TEST CONTRACTOR	PROJECT MANAGER
Santa Fe Contractors	George Gerow.

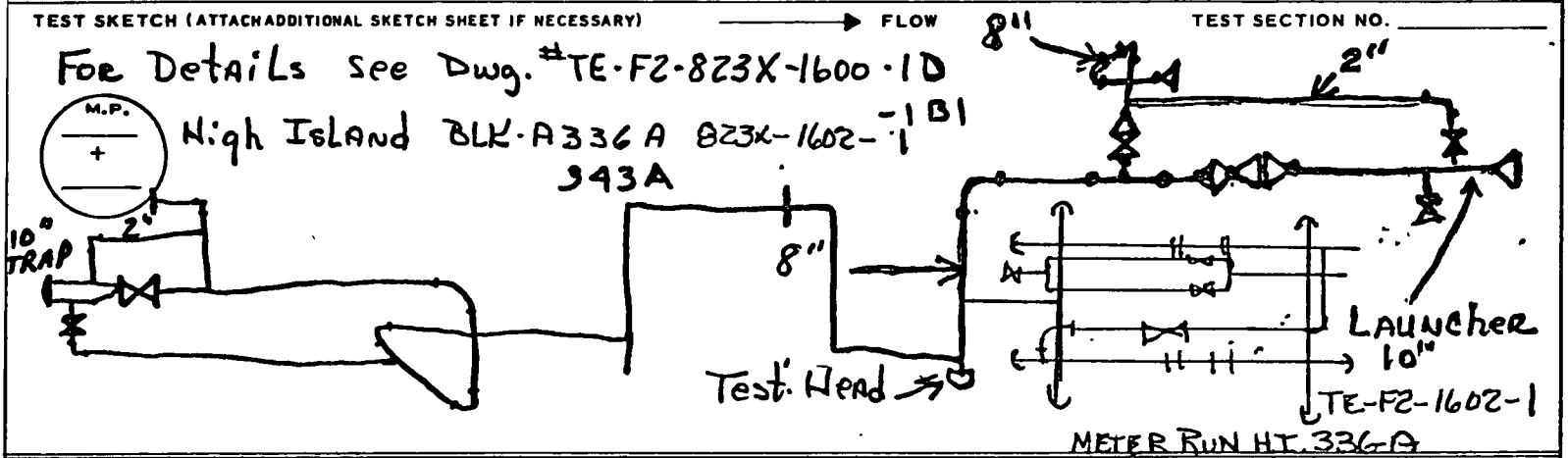
COMPANY PERSONNEL INVOLVED: Andy Cotton, Gerald McRae, Gene Haynes

TEST MEDIUM (WATER, GAS, AIR, OTHER): Tested with city water

RECEIVED
APR 04 1984
Minerals Management Service
Rules and Procedures

	END OF TEST SECTION	PRESSURE POINT	HIGH ELEVATION	LOW ELEVATION	END OF TEST SECTION
MAP PLUS	Testing done @ Santa Fe Fab. yd. Houma, LA.				
ELEVATION (FEET)	0	0	0	0	0
TEST PRESSURE (PSI)	2160	2160	2160	2160	2160
% S.M.Y.S	53 %	53 %	53 %	53 %	53 %

TEST SKETCH (ATTACH ADDITIONAL SKETCH SHEET IF NECESSARY) → FLOW TEST SECTION NO. _____



USEFUL CONVERSION FACTORS: • 1 FOOT OF WATER = .433 PSI • 1 PSI = 2.31 FEET OF WATER	WATER SOURCE	MILE POST	WATER SOURCE TEMPERATURE
	City water		105° To 110°

DEVIATION DATA (OBSERVED AT PRESSURE PT)		PRESSURE			
	INITIAL DEVIATION:	2172 PSIG	% S.M.Y.S.		
	FINAL DEVIATION:	2172 PSIG	% S.M.Y.S.	DEVIATION	2160 To 2175 PSI

FAILURE DATA (OBSERVED AT FAILURE PT)	DATE	TIME	A.M. P.M.	MAP STATION	ELEVATION	FAILURE PRESSURE PSIG	% S.M.Y.S.
	DESCRIPTION (ATTACH SKETCH OR PHOTO)			REPAIRS MADE (USE BACK IF NEEDED)			

☑ ALL TIE-IN WELDS WERE NONDESTRUCTIVELY TESTED BY _____

METHOD. _____

ELEVATION DATA DERIVED FROM PROFILE SHEET TE- OR U.S.G.S. QUAD SHEET:

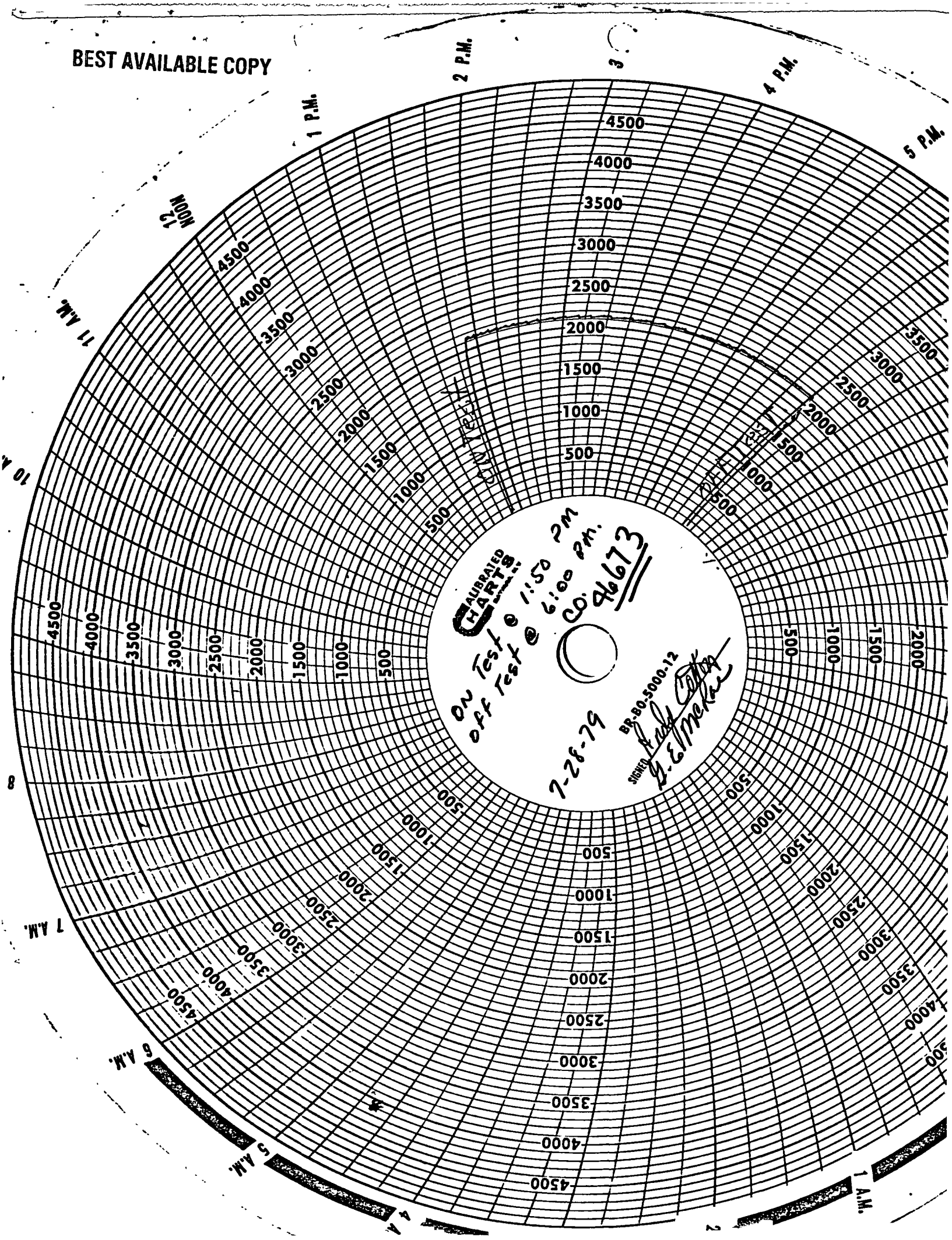
TEST REJECTED	TEST ACCEPTED	DATE
BEST AVAILABLE COPY		
NOTE: SEE ABOVE FAILURE DATA	TEST INSPECTOR SIGNATURE: Gerald E. McRae	7-28-79
AS-CONSTRUCTED	DISTRICT SIGNATURE: S. B. Cantey	11/20/79
SIGNATURE: _____	DIVISION SIGNATURE: R. H. Robertson	11-26-79
DATE: _____	AGENCY SIGNATURE:	

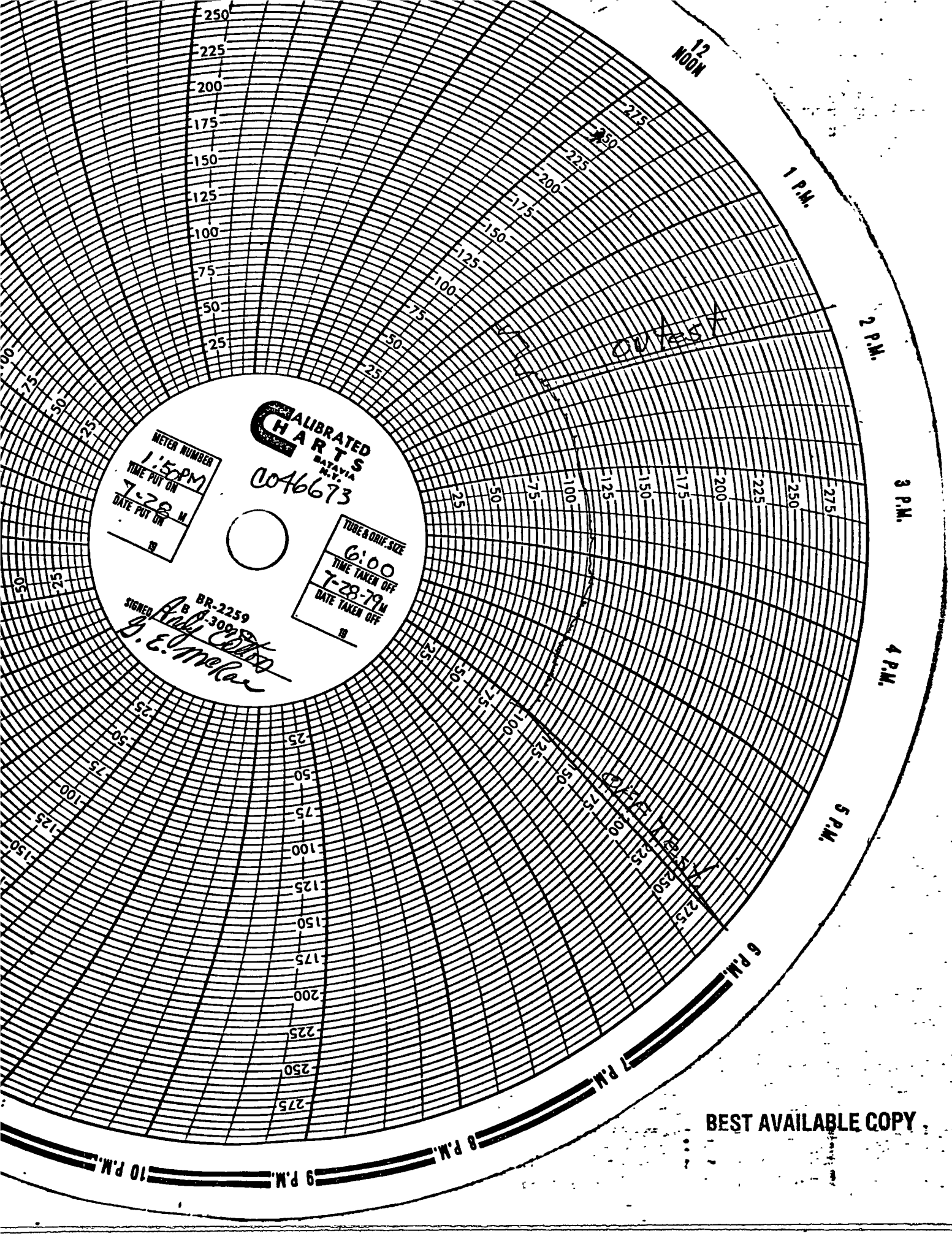
TAB F TEST PRESSURES

DATE	TIME	DEAD WEIGHT	TEMPERATURE		REMARKS: (ON TEST, WEATHER, BLEED OFF, OFF TEST, NO. OF STROKES FOR REPRESSURE, ETC.)
			TEST WATER	AMBIENT	
1-28-79	1:50 PM.	2172	105°	94°	Weather Cond. P/C & windy
	2:00	2165	107°	99°	ON Test @ 1:50 - NO Leaks
	2:15	2175	110°	99°	
	2:30	2165	110°	94°	
	2:45	2179	110°	99°	
	3:00	2166	110°	96°	
	3:15	2164	110°	96°	
	3:30	2173	110°	96°	
	3:45	2170	110°	96°	
	4:00	2171	110°	96°	
	4:15	2166	110°	96°	
	4:30	2161	110°	94°	Pump up 2161 To 2166 @ 4:30
	4:45	2170	110°	99°	" " 2160 To 2165 @ 4:45.
	5:00	2171	105°	92°	" " 2160 To 2173 @ 4:58
	5:15	2162	105°	92°	" " 2160 To 2173 @ 5:03
	5:30	2173	105°	98°	" " 2160 To 2173 @ 5:11
	5:45	2173	105°	94°	" " 2160 To 2173 @ 5:37
	6:00	2172	105°	99°	End Test & Bled Down

COMMENTS: Dead Weight: Chandler Eng. Co. Serial # 11074 - Tested 1-23-79
Pres. Recorder: Barton Recorder Ser. # 242A-9012 - Tested 6-8-79
Temp. Recorder: Barton Recorder Ser # 242A-4163 - Tested 5-30-79

Tested Platform piping - High Island BLK A-336 A & Platform piping A-343 Both Assemblies Together.





TAX DISTRICT DATA

OWNERSHIP & LINE LIST NO. H.I.O.S.-HI.ISL.BLK.A-336A

BEST AVAILABLE COPY

PT.	BEARING & DISTANCE		LAMBERT COORDINATES	
1			X=3,694,528.97'	Y=131,646.72'
2	N 72°52'45"W	622.85'	X=3,693,933.47'	Y=131,830.08'
3	N 52°04'32"W	374.93'	X=3,693,637.91'	Y=132,060.52'
4	N 64°51'25"W	1,053.02'	X=3,692,684.83'	Y=132,507.92'
5	N 62°19'04"W	494.61'	X=3,692,246.96'	Y=132,737.71'
6	N 65°59'40"W	449.37'	X=3,691,836.14'	Y=132,920.52'
7	N 61°10'39"W	642.89'	X=3,691,272.60'	Y=133,230.46'
8	N 72°41'44"W	428.65'	X=3,690,863.60'	Y=133,357.96'
9	N 70°28'58"W	495.47'	X=3,690,396.76'	Y=133,523.49'
10	N 53°01'27"W	521.35'	X=3,689,979.81'	Y=133,837.06'
11	N 77°24'58"W	495.14'	X=3,689,496.87'	Y=133,944.93'
12	N 66°21'15"W	557.29'	X=3,688,986.41'	Y=134,168.46'
13	N 63°40'10"W	477.54'	X=3,688,558.26'	Y=134,380.27'
14	N 61°47'21"W	1,029.26'	X=3,687,651.45'	Y=134,866.81'
15	N 72°44'11"W	1,294.57'	X=3,686,415.25'	Y=135,251.00'
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				

PROFILE

SCALE: HORIZ: 1"=400 FT. VERT: 1"= 20 FT.

Line Was Laid In Accordance With Requirements Of B.L.M. Permit As Issued

BEST AVAILABLE COPY

NOTE: CO-ORDINATES ON POINTS 1-15 WERE ESTABLISHED BY ODOM OFFSHORE SURVEY & ASSOC. SURVEY BEARINGS AND DISTANCES WERE CALCULATED USING THE LAMBERT GRID (LOUISIANA SOUTH ZONE) SYSTEM. THE ROUTE AS SHOWN MAY NOT NECESSARILY BE THE EXACT LOCATION OF THE PIPELINE.

LOCATION OF RIGHT-OF-WAY HAS BEEN ACCURATELY DELINEATED UPON THIS MAP.
Harry M. McLeod
HARRY M. McCLEOD
TEXAS REGISTERED PROFESSIONAL ENGINEER Nº 14093

HARRY M. McLEOD 14093 REGISTERED PROFESSIONAL ENGINEER

MATERIAL SUMMARY

ITEM NO.	DESCRIPTION
1	ANODES, CYLINDRICAL 8"
2	PIPE, 8.625"O.D. X .406"W.T. GR.X-42 U.S. Steel
3	PIPE, 8.625"O.D. X .500"W.T. GR. B Youngstown

COATING "A" --- 3M Scotchkote 212

SN 5443
OCS-G 4040

RECEIVED
APR 04 1984
Minerals Management Service
Rules and Production

C.O. NUMBER & DESCRIPTION	C.O. 46673 ORIG. CONST.
FIELD BOOKS PRELIM.	
CONST.	13862
FINAL	13862
LOG NOTES	13887

REFERENCE DRAWINGS

DRAWING NO.	TITLE
TO-F2-823X-1600-IA & IAI	PIPING DETAILS PLATFORM A-343A
TO-F2-823X-1600-IB & IBI	PIPING DETAILS PLATFORM A-336A

TENNECO

Tennessee Gas Pipeline Company
Division of Tenneco Inc.
Engineering Department — Houston, Texas

DRAWN BY RAS JR.	DATE: 8-24-81
CHECKED BY AMJ	DATE 10-9-81
CORRECT BY R.S.V.	DATE 11-5-81
DESIGNED BY	DATE
APPROVED BY HMM	DATE 11-6-81
	SCALE: SHOWN
ISSUE DATES ORIGINAL	2-28-82
LAST	2-28-82

H.I.O.S.- HIGH ISLAND BLK.A-336A LN.
LINE NO. 823X-1600
HIGH ISLAND AREA, GULF OF MEXICO

VALVE SECTION ENTIRE LINE ON THIS SHEET

APPROVED BY T.R. Halbrook ASST. CHIEF ENGINEER

TENNESSEE GAS PIPELINE CO.

TO-F2-823X-1600-1

3340 (210)

March 24, 1980

Tenneco, Inc.
Attention: F. J. Millette
P. O. Box 53388
Lafayette, Louisiana 70505

Gentlemen:

Please furnish proof of construction in accordance with 43 CFR 3340.3 on the following pipeline rights-of-way:

OCS-G Number	Decision Issued	OCS-G Number	Decision Issued
3360	9-15-76	4061	9-20-79
3640	12-16-77	4150	10-09-79
3645	3-22-78	4154	10-11-79
3837	8-25-78	4158	10-11-79
3867	11-02-78	4160	10-22-79
3873	11-02-78	4161	10-22-79
4028	6-12-79	4169	11-05-79
4029	8-09-79	4171	12-13-79
4030	7-23-79	4172	12-13-79
4040	8-14-79	4173	12-13-79

H. P. Sieverding
Acting Manager

210:DWild:prb:3/24/80

NOTIFICATION OF CONSTRUCTION:

Company representative furnishing the following information R.S. Perot

Telephone Number (318) 233-7802 Date 8-27-79

1. OCS Number G 4040
2. Name of Company Tenneco, Inc.
3. Name of Contractor Santa Fe Engineering
4. Name of lay barge ??
5. Size of Pipeline 10.75-INCH GAS 1.68 miles long
6. From where to where Tenneco Inc's "B" platform in Block A-336 to 30" H.O.S. p/l in Block A-343, all located in High Island Area.
7. Where construction begins and ends (i.e., which platform) A-343 to A-336
8. Method of laying Conventional ?
9. How long barge will be on job 30 days lay + connection
10. Where heliports are available On Barge
11. Does the pipeline cross safety fairway(s)? (Go to map for information) NO.

    Where

    Initial and teminal points: Initial: X = Y =

    Terminal: X = Y =

12. When the barge will begin (date) August 27, 1979

Notify: Frank Torres, U. S. Geological Survey, 837-4720, Ext. 237 (Give him items 1 10 & 12)). Date Contacted N/A

Notify only if construction crosses or in close proximity of fairways Chief O'Neil, Petty Officer Lutali, or Chief Flannegan, U. S. Coast Guard, telephone #6236 (upstairs). Give items 1 - 9 & 11 - 12. Date Contacted N/A

Items 1, 2, 5, 6, and 11 can be determined from the file if the company representative doesn't know them. Item 11 should be determined on a map in this office (see Bill Overstreet).

BLM Employee [signature] 8-28-79

AJB
8-28-79

Tennessee Gas Pipeline
Division of Tenneco Inc

P.O. Drawer 53388
Lafayette, Louisiana 70501
(318) 233-7802

August 24, 1979

The Bureau of Land Management
U. S. Dept. of The Interior
Hale Boggs Federal Building
500 Camp Street, Suite 841
New Orleans, Louisiana 70113

Attn: Chief, Division of Operations

Your Re: OCS-G 4040

Our Re: H. I. Blk. A-336B Line

Dear Sir:

Please be advised that Tennessee Gas Pipeline Company's contractor, Santa Fe Engineering, plans to start construction on the above captioned line on or before August 27, 1979. The lay barge does have a heliport.

Yours very truly,

R. S. Perot
Right of Way Agent

RSP/jsb

cc: R. L. Sanderson
L. J. Broussard
H. E. Fisher
R. G. Robertson
J. D. DeBlieux
F. J. Millette, Jr.
File

RECEIVED
AUG 27 11 35 AM '79
BUR OF LAND MGMT.
OUTER CONTINENTAL
SHELF OFFICE
NEW ORLEANS, LA

NEW ORLEA...
FILE CODE
ROUTE INITIAL
MGR.
ASST. MGR.
AUG 27 1979
P. LEGAL
PAO
EAD
OPS
STUDIES
MGMT. SER.

SN 5443

OCS-G 4040

High Island Area

East Addition,
South Extension
Blocks A-336, A-343

August 7, 1979

Tenneco Inc.

AUG 2 0 1979

Right-of-Way

ACTION - APPLICATION APPROVED

Your application for a 10" natural gas pipeline (H.I.O.S. A-336-B Line) dated May 11, 1979, with its attachments is approved with the following additions and corrections:

1. The guidelines for preparation of a pipeline application that are applicable and agreed to by the applicant are dated February 13, 1978.

2. The ANSI 600 valves, flanges and fittings should not be subjected to a body test greater than 2,175 psig.

3. Hydrostatic test data will be furnished this office within ninety (90) days following the test.

The permittee agrees that if any site, structure, or object of historical or archaeological significance should be discovered during the conduct of any operations within the permitted right-of-way, he shall report immediately such findings to the Manager, New Orleans OCS Office, and make every reasonable effort to preserve and protect the cultural resource from damage until the Manager, New Orleans OCS Office, has given directions as to its preservation.

Permittee agrees to comply with all regulations and conditions as may be prescribed by the Secretary of the Interior, or the Secretary of Transportation including, pursuant to section 21(b) of the OCS Lands Act, as amended, provisions to assure maximum environmental protection by utilization of the best available and safest technologies, including the safest practices for pipeline burial. This agreement includes but is not limited to complying with the following stipulations:

1. Permittee shall transport or purchase without discrimination oil or natural gas produced from submerged lands or outer Continental Shelf lands in the vicinity of its pipeline in such proportionate amounts as the Federal Energy Regulatory Commission, in consultation with the Secretary of Energy, may, after a full hearing with due notice

NOTED—MC INTOSH

thereof to the interested parties, determine to be reasonable, taking into account, among other things, conservation and the prevention of waste.

2. Permittee shall operate its pipeline in accordance with the competitive principles set out in section 5(f)(1) of the Outer Continental Shelf Lands Act, as amended, except insofar as the Federal Energy Regulatory Commission may, by order or regulation, exempt such pipeline from any or all of the requirements of section 5(f)(1) pursuant to section 5(f)(2) (which permits such exemption of any pipeline or class of pipelines which feeds into a facility where oil and gas are first collected or a facility where oil and gas are first separated, dehydrated, or otherwise processed).

3. Unless so exempted by Federal Energy Regulatory Commission order or regulation, permittee shall operate its pipeline so as to provide open and nondiscriminatory access to both owner and nonowner shippers, and permittee shall comply with any specific conditions which the Secretary of Energy and the Federal Energy Regulatory Commission may require, after consultation with and due consideration given to the views of the Attorney General, to ensure that its pipeline is operated in accordance with the competitive principles set forth in section 5(f)(1).

/s/ H. P. Sieverding
H. P. Sieverding, Acting Manager
Date: August 14, 1979

Tenneco Inc.
hereby agrees to be bound by the foregoing.

/s/ F. J. Millette
F. J. Millette, Agent and Attorney-in-Fact

Date: August 13, 1979

cc: Geological Survey, USDI
Office of Pipeline Safety Operations, USDT

5/29/79

United States Department of the Interior

GEOLOGICAL SURVEY
434 IMPERIAL OFFICE BLDG . 3301 N CAUSEWAY BLVD
P O BOX 7944
METAIRIE, LOUISIANA 70010
TEL (504) 837-4720

In Reply Refer To: OS-5

Memorandum

To: Manager, Bureau of Land Management, 841 Hale Boggs Federal Building, 500 Camp Street, New Orleans, Louisiana 70130

From: Conservation Manager, Gulf of Mexico Region

Subject: Tennessee Gas Pipeline Company's Pipeline Right-of-Way Application, BLM OCS-G 4040, Reference 2883(210)

We have reviewed the safety features and design specifications for the subject Right-of-Way Application, dated May 11, 1979, in accordance with the MOU dated August 1, 1974. It is for the construction, maintenance, and operation of a 10 3/4-inch gas pipeline 8,878 feet in length from Tenneco's proposed Platform "B", High Island Block A-336, lease OCS-G 2424, to High Island Offshore System's Platform "A", High Island Block A-343, lease OCS-G 2741.

Based upon information submitted in the application, the design characteristics of this pipeline are calculated to be as follows:

Pipeline Component	Maximum Allowable Operating Pressure/WP Ratings
Submerged component	2,344 psig
Riser component	1,628 psig
Valves, flanges, fittings	1,440 psig

The hydrostatic pressure test with water will be at 2,160 psig for eight hours for the submerged component. The riser will be pre-installation-tested to a pressure of 2,160 psig for four hours. The ANSI 600 valves should not be subjected to a test-pressure differential greater than 1,440 psig. The ANSI 600 valves, flanges, and fittings should not be subjected to a body test greater than 2,175 psig.

Based on these calculations, we recommend that the maximum allowable operating pressure for this pipeline be 1,440 psig (which is the hydrostatic test pressure divided by 1.5) and that this pressure may be exceeded only when hydrostatically pressure-testing the pipeline.

The technical aspects of the proposed pipeline are acceptable in accordance with appropriate regulations and standards.

We would appreciate receiving a copy of the plat showing the location of the pipeline as installed.

Lowell S Hammons

Acting Conservation Manager

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

IN REPLY REFER TO:
2883 (210)

To : Conservation Manager
Gulf of Mexico OCS Operations

Date: May 18, 1979

From : Manager
New Orleans OCS Office

Subject : Tenneco Inc.'s Pipeline Right-of-way Application (OCS-G 4040)

In accordance with the memorandum of understanding between the Bureau of Land Management and U. S. Geological Survey signed August 1, 1974, the subject application is attached.

Please review the technical aspects of the proposed pipeline. If you have any questions regarding this matter, please contact Mr. Autry J. Britton of this office.

John L. Rankin

Attachments
1. Application dated May 11, 1979
2. Drawing No. TA-L2-F823X-1600-1, -1A, -1B, and -1C, Revision 1

210/AJBritton/mhh/5-18-79

DSC-1541-2
Mar 1974

Tennessee Gas Pipeline
Division of Tenneco Inc

P.O. Drawer 53388
Lafayette, Louisiana 70501
(318) 233-7802

May 11, 1979

Mr. John L. Rankin, Manager
Outer Continental Shelf Office
500 Camp Street, Suite 841
Hale Boggs Federal Building
New Orleans, Louisiana 70130

Re: Application - Right of Way for
10" Natural Gas Pipeline in
High Island Area, Gulf of Mexico
(H.I.O.S. A-336-B Line)

Dear Mr. Rankin:

Pursuant to Section 5 (c) of the Outer Continental Shelf Lands Act of August 7, 1953 (67 Stat.464), and the regulations contained in 43 CFR 2883, Tennessee Gas Pipeline Company, A Division of Tenneco Inc., is filing this application for a right of way 200 feet (200') in width for the purpose of constructing and maintaining a ten inch (10") natural gas pipeline in the High Island Area, Gulf of Mexico. Tennessee Gas Pipeline Company agrees that said right of way, if approved, will be subject to the terms and conditions of said regulations.

This pipeline will be used to gather and transport natural gas from Tenneco's "B" platform in Block A-336, High Island Area, in the Gulf of Mexico. The tentative construction dated is August 1, 1979, and tentative completion date is September 30, 1979.

As set forth in the April 1, 1976, guidelines as amended February 1, 1977, and April 21, 1977, the applicant agrees to furnish the following:

1. Letter of Application, in duplicate.

2. Certified and Return Receipts with copies of letter of notification to the following lease and right of way holders:

a. Gulf Oil Company - OCS-G 2424
b. Tenneco Exploration Ltd. - OCS-G 2424
c. High Island Offshore System - OCS-G 3302
d. The Superior Oil Company - OCS-G 2741
e. Exxon Corporation - OCS-G 2741
f. Canadian Superior Oil (U.S.) Ltd. - OCS-G 2741
g. Alminex U.S.A., Inc. - OCS-G 2741
h. Natresco Incorporated - OCS-G 2741

3. Six (6) blue line prints of Drawing No. TA-L2-F823X-1600-1, TA-L2-F823X-1600-1A; TA-L2-F823X-1600-1B and TA-L2-F823X-1600-1C showing the location, profile and route of the proposed pipeline, Hi-Lo Censor locations and typical pipeline crossing detail.

4. Two (2) blue line prints of Drawing No. TA-L2-F823X-1600-2 showing the leases and pipeline rights of way.

5. Bury all pipelines to a minimum of 3 ft. of cover up to the 200 ft. contour. (This particular line is well below the 200 ft. contour).

6. Bury all sub-sea valves to a minimum of 1 ft. of cover regardless of water depth.

7. A hazard survey report of the proposed right of way route is attached in duplicate.

8. An archaeological survey report as stipulated in requirements is not required.

9. In accordance with the guidelines an As-Built map along with diving inspection reports will be provided within 90 days after completion of the pipeline.

10. Safety devices will be provided as set forth on attached schematic Drawing No. TA-L2-F823X-1600-1B.

11. Proper notification prior to construction and hydrostatic testing will be adhered to.

12. Any pipeline crossings will be in compliance with the guidelines as set forth.

13. Any breaks, leak failures or accidents will be reported as required.

In addition to the above information, applicant submits the following information:

1. Water depth along route of proposed pipeline and pipeline in relationship to natural bottom as set forth on attached drawing No. TA-L2-F823X-1600-1A.

2. The description of the pipe and coating is as follows:

   a. Line Pipe

      10.750" OD x .500" W.T. Gr B; Weight Bare - 54.74#/ft. coated with 22 mils of heat cured epoxy or coal tar enamel 6/32" thick, giving a specific gravity of 1.36 in salt water (64.0#/cu. ft.).

   b. Riser Pipe

      10.750" OD x .500" W.T. Gr B; Weight Bare - 54.74#/ft. coated with 22 mils of heat cured epoxy or coal tar enamel 6/32" thick. Specific gravity of 1.36 in salt water (64.0#/cu. ft.).

   c. Internal Coating

      The analysis of the transported products will be monitored and preventive measures such as pigging and/or inhibiting will be employed as necessary.

3. Valves and Flanges

   a. Below water valves and flanges will be A.N.S.I. 900 series with a rated working pressure of 2160# P.S.I.

   b. Above water flanges and valves will be A.N.S.I. 600 series with a rated working pressure of 1440# P.S.I.

4. The specific gravity of the product being transported is anticipated to be .60 (Air = 1.0), T = 60^{o}F.

5. Weight, type and spacing of anodes to be used as corrosion protection are shown on attached Drawing No. TA-L2-F823X-1600-1B entitled "Schematic." The life expectancy of the proposed pipeline is indefinite. The sacrifical anodes are designed for 40 year life and are to be replaced as necessary to entend life of pipeline.

6. The design of the proposed pipeline is in accordance with "Minimum Federal Safety Standards (Department of Transportation) Title 49, CFR, Part 192."

7. Maximum Allowable Operating Pressure (M.A.O.P.) = 1440# P.S.I.G.

Maximum Capacity = 28 MMCF/D

Maximum Operating Pressure (M.O.P.) is less than or equal to 1440# P.S.I.G.

Minimum Operating Pressure = 500# P.S.I.G.

A. Calculations

Formulas:

$$P = \frac{2st}{d}$$

$$M.A.O.P. = \frac{2st\,(F)(E)(T)}{d}$$

Whereas: P = 100% S.M.Y.S.
s = Specified Minimum Yield Strength
t = Nominal Wall Thickness in Inches
d = Nominal Outside Diameter in Inches
(F) = 0.50 for Riser Pipe
= 0.72 for Line Pipe
As per Title 49, CFR, Part 192.619
(E) = 1 - for seamless and DSA welded pipe
(T) = 1 - for temperature less than 250°F

a. Riser Pipe

10.750" OD x .500" W.T. Gr "B"

$$P = \frac{2 \times .500 \times 35{,}000}{10.750} = 3{,}256\#\ P.S.I.G.$$

(1) M.A.O.P. (Design)

$$M.A.O.P. = \frac{2 \times .500 \times 35{,}000 \times .50 \times 1 \times 1}{10.750} = 1{,}628\#\ P.S.I.G.$$

(2) M.A.O.P. (Hydrostatic Test Pressure)

H.T.P. = P x 90%
= 3,256 x .90 = 2,930# P.S.I.G.
H.T.P. will be 2,160# P.S.I.G. for 4 hrs.

$$M.A.O.P. = \frac{2160}{1.5} = 1{,}440\#\ P.S.I.G.$$

(3) M.A.O.P. = 1628# P.S.I.G. (Design) or
1440# P.S.I.G. (H.T.P.)

b. Line Pipe
10.750" x .500" W.T. Gr "B"

$$P = \frac{2 \times .500 \times 35{,}000}{10.750"} = 3{,}256\#\ P.S.I.G.$$

(1) M.A.O.P. (Design)

$$M.A.O.P. = \frac{2 \times .500 \times 35{,}000 \times .72 \times 1 \times 1}{10.750} = 2344\#\ P.S.I.G.$$

(2) M.A.O.P. (Hydrostatic Test Pressure)

H.T.P. = P x 90%
= 3256 x .90 = 2930# P.S.I.G.
H.T.P. will be 2160 P.S.I.G. for 8 hrs.

$$M.A.O.P. = \frac{2160}{1.25} = 1728\#\ P.S.I.G.$$

(3) M.A.O.P. = 2344# P.S.I.G. (Design) or
1728# P.S.I.G. (H.T.P.)

Since there are A.N.S.I. 600 series valves in the system, the M.A.O.P. therefore is restricted to 1440# P.S.I.G.

8. The producers equipment will be designed for 1440# P.S.I.G.

9. The 36" line that the proposed line will tie into is 36" OD x .625" W.T. Gr X-60 pipe.

10. An originally signed copy of Non-Discrimination in Employment Stipulations is enclosed in duplicate.

11. Company contact:

Mr. Reno G. Robertson, Division Civil Engineer
P. O. Drawer 53388, OCS
Lafayette, Louisiana 70505
318/233-7802

TENNESSEE GAS PIPELINE COMPANY

Mr. John L. Rankin, Manager
Outer Continental Shelf Office
Page Six
H.I.O.S. A-336-B Line

12. Tennessee Gas Pipeline Company's Draft No. 25685 in the amount of $20.00 of which $10.00 covers the application fee and $10.00 covers the first year's rental on 1.68 miles of right of way is also enclosed.

Please refer to your miscellaneous 014 file for a copy of a resolution approved by the Board of Directors authorizing the undersigned as Supervisor-Rights of Way of Tennessee Gas Pipeline Company, A Division of Tenneco Inc., to sign for and on behalf of the Company.

We trust the above information will enable you to expedite the issuance of the Decision approving said right of way.

Yours very truly,

TENNESSEE GAS PIPELINE COMPANY
A DIVISION OF TENNECO INC.

F. J. Millette

F. J. Millette, Supervisor
Rights of Way as
Agent and Attorney-in-Fact

Certified Mail - Return Receipt No. 197535

RECEIVED
MAY 14 3 30 PM '79
BUR OF LAND MGMT.
OUTER CONTINENTAL
SHELF OFFICE
NEW ORLEANS, LA.

NOTE: This form must be executed as an original.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NONDISCRIMINATION IN EMPLOYMENT

As a condition precedent to the approval of the granting of the subject pipeline right-of-way, the grantee Tennessee Gas Pipeline Company A Division of Tenneco Inc. hereby agrees and consents to the following stipulation which is to be incorporated into the application for said right-of-way.

During the performance of this contract the grantee agrees as follows:

During performance under this grant, the grantee shall fully comply with paragraphs (1) through (7) of section 202 of Executive Order 11246 as revised (reprinted in 41 CFR 60-1.4(a)), which are for the purpose of preventing discrimination against persons on the basis of the race, color, religion, sex or national origin. Paragraphs (1) through (7) of section 202 of Executive Order 11246 as amended are incorporated in this grant by reference.

F. K. Mitchell
Signature of Grantee

Date: May 11, 1979

HIGH ISLAND AREA

TENNECO
OCS-G-2424

A-337 | A-336 | A-335

PROPOSED
TENNECO OIL COMPANY
BLK A-336B PLATFORM
HIGH ISLAND AREA
X = 3,686,415 25
Y = 135,251 07
LAT = 28°06'05 532"
LONG = 93°46'05.231"

EXIST H.IO.S 36" PIPELINE

℄ PROPOSED RIGHT-OF-WAY FOR 10" T.G.P NATURAL GAS PIPELINE

Y=134,640.00

S 66°02'52"E - 8,878.28'
FLOW

EXXON, ET AL
OCS-G-2741

A-342 | A-343 | A-344

X = 3,678,000
Y = 130,000

H.I.O.S
BLK A-343A PLATFORM
HIGH ISLAND AREA
X = 3,694,528 97
Y = 131,646 72
LAT = 28°05'26.281"
LONG = 93°44'36 543"

X = 3,701,000
Y = 130,000

PLAN

4000 0 4000 8000
SCALE OF FEET

STATE OF LOUISIANA
LARRY J. BROUSSARD
REG. NO. 14589
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

LOCATION OF RIGHT-OF-WAY HAS BEEN ACCURATELY DELINEATED UPON THIS MAP AND DESIGN COMPLIES WITH D.O.T. REGULATIONS

LARRY JAMES BROUSSARD
LOUISIANA REGISTERED PROFESSIONAL CIVIL ENGINEER NO. 14589

THIS PIPELINE TO BE USED TO TRANSPORT NATURAL GAS FROM OFFSHORE TEXAS TO EXISTING SYSTEMS.
ALL BEARINGS SHOWN ARE LAMBERT.
PROPOSED WIDTH OF RIGHT-OF-WAY 200'.
TOTAL LENGTH OF PIPELINE 8,878.28 FEET = 1.68 MILES.

OFFICE COPY

NO	DATE	REVISION	REV	CKD	APR
1	4-24-79	REDRAWN – CHANGED ROUTE	GLD	CJB	

DRAWING NO.	TITLE
TA-L2-F823X-1600-1A	PROFILE
TA-L2-F823X-1600-1B	SCHEMATIC
TA-L2-F823X-1600-1C	PIPELINE CROSSING DETAIL

REFERENCE DRAWINGS

DRAWN BY G L D	DATE 4-24-79
CHECKED BY C J B.	DATE "
CORRECT BY	DATE
APPROVED BY	DATE
SCALE SHOWN	C O

OCS-G 4040

Tennessee Gas Pipeline Company
Division of Tenneco Inc
Engineering Department Houston, Texas

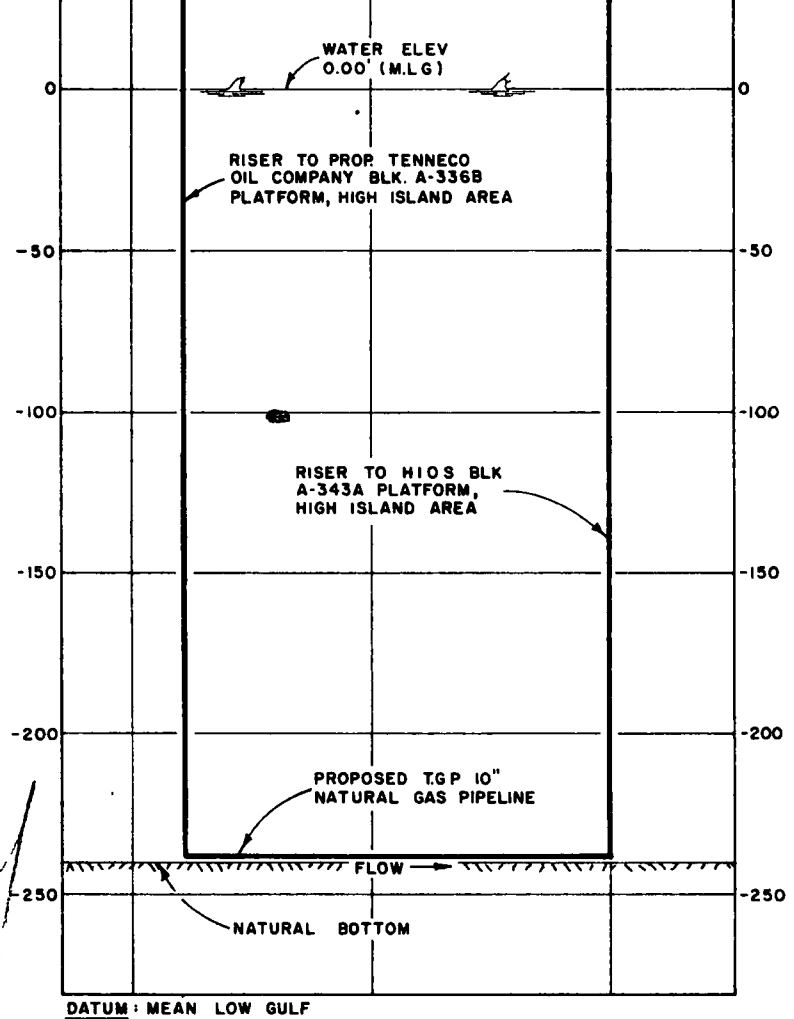
APPROVED BY
FOR CHIEF ENGINEER

APPLICATION PLAT FOR PROPOSED NATURAL GAS PIPELINE RIGHT-OF-WAY

Tennessee Gas Pipeline Co.

TA-L2-F823X-1600-1

HIGH ISLAND BLK A-336B



STATE OF LOUISIANA
LARRY J. BROUSSARD
REG. NO. 14589
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

PROFILE

60 0 60
VERTICAL SCALE OF FEET

4000 0 4000
HORIZONTAL SCALE OF FEET

NO.	DATE	REVISION	REV.	CKD	APR
1	4-25-79	REDRAWN - CHANGED ROUTE	GLD	CJB	

DRAWING NO.	TITLE
TA-L2-F823X-1600-1	PLAN
TA-L2-F823X-1600-1B	SCHEMATIC
TA-L2-F823X-1600-1C	PIPELINE CROSSING DETAIL

REFERENCE DRAWINGS

DRAWN BY G.L.D	DATE 4-25-79
CHECKED BY C.J.B.	DATE "
CORRECT BY	DATE
APPROVED BY	DATE
SCALE SHOWN	C O

TENNECO

Tennessee Gas Pipeline Company
Division of Tenneco Inc
Engineering Department **Houston, Texas**

APPROVED BY
FOR CHIEF ENGINEER

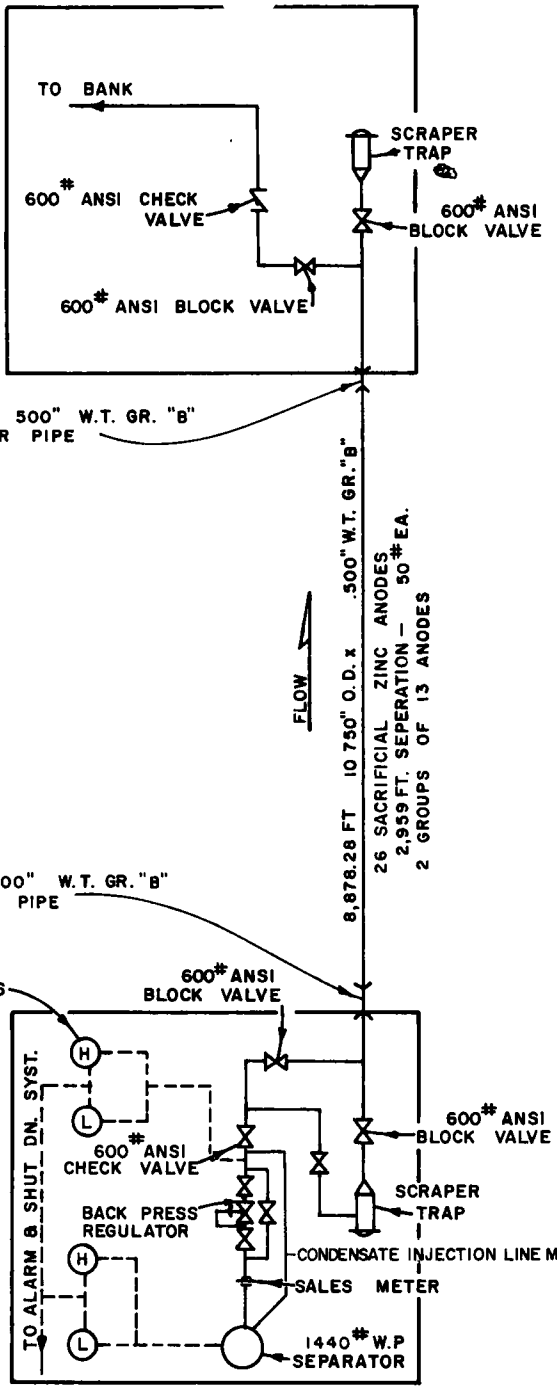
APPLICATION PLAT FOR PROPOSED NATURAL GAS PIPELINE RIGHT-OF-WAY

Tennessee Gas Pipeline Co.

TA-L2-F823X-1600-1A

HIGH ISLAND BLK. A-336B

H.I.O.S.
HIGH ISLAND AREA
BLK. A-343A PLATFORM



NOTE:
THE DESIGN CHARACTERISTICS OF THE PIPELINE ARE IN COMPLIANCE WITH D.O.T. REGULATIONS.

TENNECO OIL CO.
HIGH ISLAND AREA
BLK. A-336B PLATFORM

STATE OF LOUISIANA
LARRY J. BROUSSARD
REG. No. [illegible]
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

NO.	DATE	REVISION	REV.	CKD	APR
1	4-26-79	REDRAWN - CHANGED ROUTE	GLD	CJB	

REFERENCE DRAWINGS	
DRAWING NO.	TITLE
TA-L2-F823X-1600-1	PLAN
TA-L2-F823X-1600-1A	PROFILE
TA-L2-F823X-1600-1C	PIPELINE CROSSING DETAIL

DRAWN BY G.L.D.	DATE 4-26-79
CHECKED BY C.J.B	DATE "
CORRECT BY	DATE
APPROVED BY	DATE
SCALE SHOWN	C.O.

Tennessee Gas Pipeline Company
Division of Tenneco Inc
Engineering Department — Houston, Texas

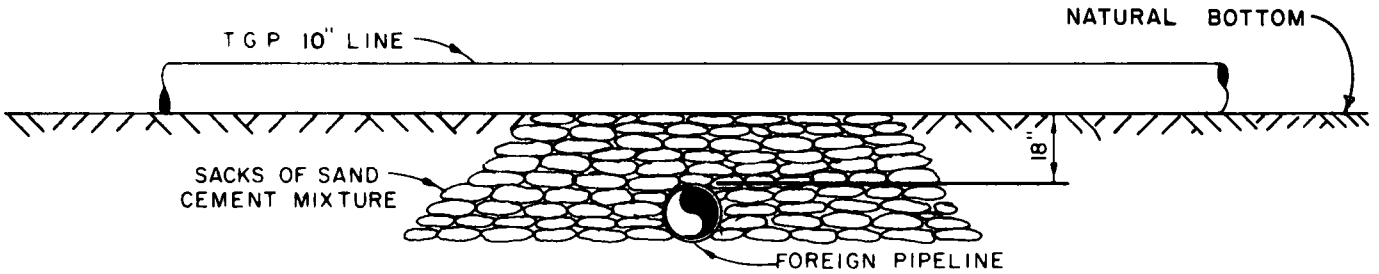
APPROVED BY
FOR CHIEF ENGINEER

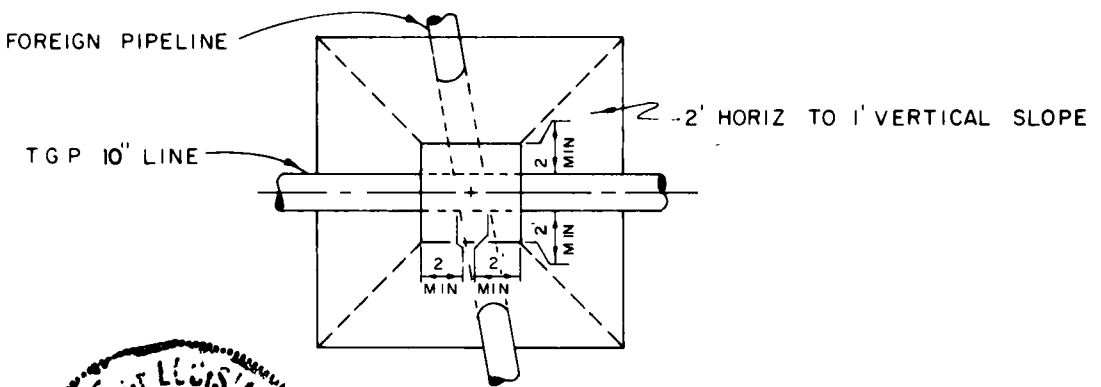
SCHEMATIC
PROPOSED T.G.P. 10" HIGH ISLAND
BLK. A-336B LINE
HIGH ISLAND AREA GULF OF MEXICO

Tennessee Gas Pipeline Co.

TA-L2-F823X-1600-1B

BEST AVAILABLE COPY





PLAN

STATE OF LOUISIANA
LARRY J. BROUSSARD
REG. No 14589
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

DRAWING NO	TITLE
TA-L2-F823X-1600-1B	SCHEMATIC
TA-L2-F823X-1600-1	PLAN
TA-L2-F823X-1600-1A	PROFILE

NO	DATE	REVISION	REV	CKD	APR

REFERENCE DRAWINGS

DRAWN BY G.L.D.	DATE 3-5-79
CHECKED BY C J B	DATE "
CORRECT BY	DATE
APPROVED BY	DATE
SCALE NONE	C O

Tennessee Gas Pipeline Company

Engineering Department — Houston, Texas

APPROVED BY Reno H. Roberts FOR CHIEF ENGINEER

PROPOSED 10" NATURAL GAS PIPELINE
TYPICAL PIPELINE CROSSING
SEPARATION DETAIL
HIGH ISLAND AREA, GULF OF MEXICO

Tennessee Gas Pipeline Co.

TA-L2-F823X-1600-1C

HIGH ISLAND BLK. A-336B

Proposed Platform
10 3/4" P/L Tenneco's "B", HI A-336, G 2421 4040
~~To ASSTI w HIOS 36" HI A 343, G 2741~~ ~~(Gen OCS-G 3302)~~
to HIOS Plat "A", HI A-343, G 2741 ~~MAOP 1440~~

PIPELINE APPLICATION CHECK LIST

(1.68 mi) 8878.28 (1.68149 mi) **BEST AVAILABLE COPY**

INSTRUCTIONS: Check the blank on the left if the statement is affirmative or correct data submitted. Mark N/A (not applicable) where appropriate. Place an X in the blank if the answer is no or if the data was not submitted. All blanks marked X must be rectified to a check (or qualified) before approval can be given for the pipeline. Enter data in the blanks on the right.

A. Verify the following general information:

I. SOP

_____ a. Do the leases involved on the P/L application appear on the current Suspension of Production (SOP) Lease List?

II. POD

_____ a. Is the pipeline presently covered by an approved Plan of Development (POD)? (Discuss ROU&E with Doug.) If yes, go to III. If No, go to 250.34. (Requires submittal to POD/P by operator to District.)

III. USGS Application

_____ a. The applicant is a Federal lease holder and the pipeline is to be used for such purposes as:

_____ 1. Moving production to a control point for gathering, treating, storing, or measuring.

_____ 2. Delivery of production to a point of sale.

_____ 3. Delivery of production to a pipeline operated by a transportation company.

_____ 4. Moving fluids in connection with lease operations, such as for injunction purposes.

_____ b. The pipeline is within the lease boundary owned by the operator (If yes, include 30 CFR 250.19(b) in approval.)

_____ c. Pipeline is within continguous lease boundaries. (If yes, include 30 CFR 250.19(b) in approval.)

_____ d. Pipeline is within non-continguous lease boundaries. (If yes, include 30 CFR 250.18(c) and 30 CFR 250.19(b) in approval.)

_____ e. Lessee's "intent to cross" letter are received. (Wait 30 days for letters of objection. Only objections concerning interference with lease operations will be considered.)

_____ f. Pursuant to Secretarial Order 2974 of April 30, 1975, check the following:

_____ 1. FWS notified _____.

_____ 2. FWS comment received _____.

_____ 3. BLM notified _____.

_____ 4. BLM comment received _____.

_____ 5. Environmental Impact Evaluations completed _____.

_____ 6. If related to new POD/P, date of POD/P approval _____.

IV. BLM Application

✓ a. The pipeline must be able to be subjected to common carrier provisions (i.e., no downstream production facilities or downstream pipelines which could not be subjected to common carrier provisions).

V. DOT Pipelines

✓ a. The pipelines are shoreward of the outlet flange at the first process facility (If yes, include 49 CFR 192 for gas P/L or 49 CFR 195 for oil P/L in approval).

VI. DOI Pipelines

N/A a. Pipelines not covered by V above.

B. Verify that the information shown on the safety equipment schematic drawing contains the following:

✓ I. The pipeline leaving the platform receiving production from the platform is equipped with high and low pressure sensors located upstream of departing check valves to directly or indirectly shut-in the well or wells on the platform.

N/A II. The pipeline delivering production to production facilities on the platform is equipped with an automatic fail close valve tied into the automatic and remote shut-in system.

✓ III. The pipeline crossing the PRODUCTION platform which does not deliver production to the platform, but which may or may not receive production from the platform, is equipped with high and low pressure sensors connected to an automatic fail close valve located in the upstream portion of the pipeline at the platform. In addition, the sensors are tied into either the platform's automatic and remote shut-in system or an independent remote shut-in system.
PLAT NON-PRODUCTION PLAT ∴ NOT APPLICABLE PER A4D 5/22/79

✓ IV. The pipeline boarding the platform is equipped with a check valve.

✓ V. The pipeline leaving the platform is equipped with a check valve.

N/A VI. The pipeline pump is shown as well as its associated high and low pressure shut-in device.

✓ VII. If pipeline pilots are located on any process vessel, all flow restrictions (backpressure valves, chokes) downstream of pilots are indicated on the schematic.

✓ VIII. Pressure source is drawn into the schematic with the following:

✓ a. Source SEPARATOR.

✓ b. Maximum source pressure, psig 1440.

✓ IX. The rated working pressures of all separators, pumps, compressors, valves, flanges, and fittings upstream of and including the boarding automatic fail close valve are shown.

ANSI 600 1440

C. Verify that the location plat depicts the following:

✓ I. Location of P/L

✓ II. Location of P/L

✓ III. Size of P/L

✓ IV. Type of service

✓ V. Direction of flow

D. Verify that the information given on the submitted data sheet is complete; and calculate the $MAOP_{sc}$, $MAOP_{rc}$, $MAOP_{p/l}$.

I. General information for calculating $MAOP_{sc}$, $MAOP_{rc}$, etc.

a. Size of P/L, inches 10.75

b. Weight of P/L, lbs./ft. 54.74

c. Grade of P/L B

d. Wall thickness, inches 0.500

e. Size of riser, inches 10.75

f. Weight of riser, lbs./ft. 54.74

g. Grade of riser B

h. Wall thickness of riser, inches 0.500

i. Minimum WP rating of piping, fittings, valves, psig 1440

j. Hydrostatic test pressure (HTP), psig RISER 2160 . LINE 2160

k. Hold time, hrs. 4 . 8

l. Classification of P/L (oil or gas) gas

III. DOT Pipelines

a. IP @ SMYS for submerged pipeline = $\frac{2st}{D} = \frac{(2)(35000)(.5)}{10.75} = 3256$

b. (.72 x IP @ SMYS) for submerged pipeline = 2344 ($MAOP_{sc}$)

c. IP @ SMYS for riser = $\frac{2st}{D} = \frac{(2)(35000)(.5)}{10.75}$

d. For oil P/L (.60 x IP @ SMYS) for riser = _____ ($MAOP_{rc}$)

For gas P/L (.50 x IP @ SMYS) for riser = 1628

e. See Ii above 1440 ($MAOP_{pfv}$)

✓ f. Are b, d, and e $\geq$ MSP

1440 $\geq$ 1440

NOTE: If not, a departure is necessary requiring redundant safety equipment.

_____ A written request for a departure has been received and the redundant safety equipment is satisfactory.

g. Limit of Testing

N/A 1. For oil P/L:

Is 1.25 MSP $\leq$ HTP $\leq$ .95 (IP @ SMYS for smaller IP of a and c above)

_____ $\leq$ ~~2160~~ $\leq$ _____

✓ 2. For gas P/L riser component:

Is 1.50 MSP $\leq$ HTP of riser $\leq$ .95 (IP @ SMYS of c above)

2160 $\leq$ 2160 $\leq$ 3093

✓ 3. For gas P/L submerged component:

Is 1.25 MSP $\leq$ HTP of submerged component $\leq$ .95 (IP @ SMYS of a above)

1800 $\leq$ 2160 $\leq$ 3093

NOTE: If not, inquire of the operator as to what he considers a limit of testing as a percentage of IP @ SMYS.

N/A Operator's answer _____ % of IP @ SMYS (for smaller IP)

h. $MAOP_{p/l}$ based on HTP

N/A 1. For oil P/L HTP/1.25 = _____

✓ 2. For gas P/L riser component HTP/1.5 of riser = 2160 / 1440

✓ 3. For gas P/L submerged component HTP/1.25 of submerged component = 2160 / 1728

N/A i. For oil P/L Is HTP hold time ≥ 24 hours

✓ For gas P/L Is HTP hold time ≥ 8 hours

j. $MAOP_{p/l}$ = the smallest of b, d, e, and h above

1440 ($MAOP_{p/l}$)

k. Test pressure ANSI & API carbon steel RTJ & RF flanges and valves

2160 (From table 3.1 page 31 API RP 14E)

l. Is k ≥ HTP 2160 ≥ 2175

NOTE: If not, add statement in approval letter to insure valves and flanges are not subjected to test pressure.

IV. Pipeline Receiving Production (Installed Prior to July 31, 1977)

	Submerged Component	Riser
a. Size,inches		
b. Grade		
c. Wall thickness, inches		
d. Minimum working pressure of valves and flanges	(MAOPpfv)	
e. Date of last hydrostatic test		
f. HTP, psig		
g. Hold time, hours		
h. MAOP based on HTP HTP/1.25		
i. IP@SMYS for submerged P/L 2ST/D		
j. (.72 X IP@SMYS) for submerged P/L	(MAOPsc)	
k. IP@SMYS for riser 2ST/D		
l. (.60 X IP@SMYS) for riser	(MAOPrc)	

m. If the receiving P/L is a DOT gas P/L and has not been tested since July 1, 1971, then what is the HAOP to which the segment was subjected during the 5 years prior to July 1, 1976?

n. MAOP of receiving P/L _ MAOP of proposed P/L _
MAOP of proposed P/L

E. Verify that the information given on the submitted data sheet is complete; and calculate the life expectancy of the pipelines corrosion protection ($LE_{p/l}$)

I. General Information for Calculating $LE_{p/l}$

✓ a. Type of corrosion protection (platform anodes, (P/L anodes,) or rectifiers)

N/A b. If platform anodes are used:

1. Type of anode _____

2. Weight of unit anode, lbs. _____

✓ c. If pipeline anodes are used:

1. Type of anode ZINC

2. Spacing interval, ft. 2959' separation - 26 zinc Anodes 50 #ea 2 groups 13 ea.

3. Weight of unit anode, lbs. 50

II. Calculated Life Expectancy of Corrosion Protection

N/A a. If platform anodes are used, are they considered adequate _____

✓ b. If pipeline anodes are used:

$LE_{p/l} = 3.82 \times 10^4 \times W^o/DIR? = \frac{3.82 \times 10^4 \times 13 \times 50}{10.75 \times 26 \times 4438.5} = 20,01$

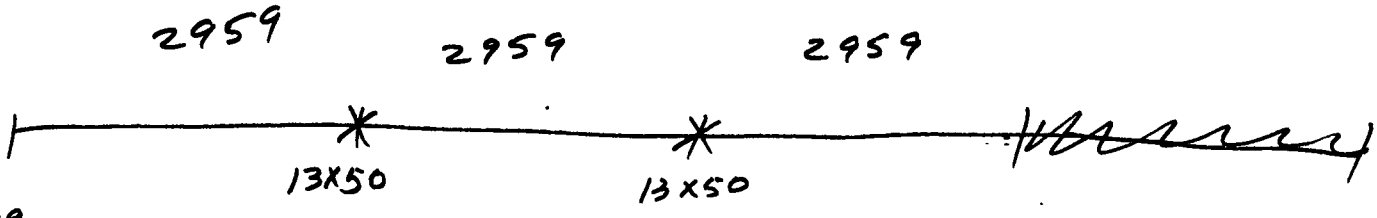
W^o = weight of one anode, pounds =

D = outside diameter of pipe, inches

I = interval = length of pipe, feet ÷ total number of anodes 26

R = consumption rate, lbs./amp-yr.

✓ c. Is our calculated $LE_{p/l} \geq 20$ years



2959
1479.5
4438.5

F. Verify that the information given on the submitted data sheet is complete; and calculate the specific gravity of the pipeline ($SP_{p/l}$)

I. General Information pertaining to $SG_{p/l}$ 22mils epoxy on "

a. Description of pipelines protective coating Coal Tar enamel 6/32

b. Description of risers protective coating _____

c. Description of pre-concrete coating _____

d. Density of concrete, lbs./cu. ft. _____

e. Thickness of concrete, inches _____

f. Thickness of asphalt/somastic _____

g. Gravity or density of products _____

For gas 16 (air = 1.0)

For oil/condensate _____ ° API, _____ (water = 1.0)

h. Given $SG_{p/l}$ 1.36

II. $SG_{p/l}$

✓ a. Expoxy-coated pipelines:

$SG_{p/l} = 2.865 \frac{W}{D^2}$ $\frac{54.74}{}$ = 1.3571

W = weight of bare pipe, lbs./ft.

D = diameter of pipe, inches

N/A b. For weighted pipelines:

$$SG_{p/l} = \frac{d_c}{d} + \frac{k_2}{(T-k_1)^2}\left(\frac{W+P}{k_3} - \frac{d_c}{d}\right)$$

d_c = density of concrete, lbs./ft.^{3}

d = density of fluid in which pipeline is submerged, lbs./ft.^{3}

k_1, k_2, k_3 = coefficients from tables

T = thickness of concrete coating, inches

W = weight of bare pipe, lbs./ft.

P = weight of double enamel coat and felt wrap, or weight of asphaltmastic coating, lbs./ft.

$SG_{p/l}$ = _____

✓ c. Is our calculated SG ≅ operator's given SG

1.3571 ≅ 1.36

NOTE: These values should be approximately the same. If not, resolve. If the SG is close to a value of 1, the pipeline is unacceptable and must be weighted with concrete or anchored securely to the bottom.

G. Verify the following general information:

I. Water Depth, ft. 240 (Max) 240 (Min)

II. Burial depth, ft. ~~4~~ 0

III. Maximum Operating Pressure (MOP) 1440 (MIN) 500

IV. Capacity 1440 28 MMCF/D